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A Study of Selected Factors Related To Attitudes Toward the Hutterites of South Dakota

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**A STUDY OF SELECTED FACTORS RELATED TO ATTITUDES
TOWARD THE HUTTERITES OF SOUTH DAKOTA**

BY

DAVID T. PRIESTLEY

**A thesis submitted
in partial fulfillment of the requirements for the
degree Master of Science, Department of
Rural Sociology, South Dakota State
College of Agriculture
and Mechanic Arts**

June, 1959

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TOWARD THE HUTTERITES OF SOUTH DAKOTA**

This thesis is approved as a creditable, independent investigation by a candidate for the degree, Master of Science, and acceptable as meeting the thesis requirements for this degree; but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser. 7

Head of the Major Department

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D. T. P.

PROLOGUE

The Field of Zaad

Upon the road of Zaad a traveler met a man who lived in a nearby village, and the traveler, pointing with his hand to a vast field, asked the man saying, "Was not this the battle-ground where King Ahlam overcame his enemies?"

And the man answered and said, "This has never been a battle-ground. There once stood on this field the great city of Zaad, and it was burnt down to ashes. But now it is a good field, is it not?"

And the traveler and the man parted.

Not a half mile farther the traveler met another man, and pointing to the field again, he said, "So that is where the great city of Zaad once stood?"

And the man said, "There has never been a city in this place. But once there was a monastery here, and it was destroyed by the people of the South Country."

Shortly after, on that very road of Zaad, the traveler met a third man, and pointing once more to the vast field he said, "Is it not true that this is the place where once there stood a great monastery?"

But the man answered, "There has never been a monastery in this neighborhood, but our fathers and our forefathers have told us that once there fell a great meteor on this field."

Then the traveler walked on, wondering in his heart. And he met a very old man, and saluting him he said, "Sir, upon this road I have met

three men who live in the neighborhood and I have asked each of them about this field, and each one denied what the other had said, and each one told me a new tale that the other had not told."

Then the old man raised his head, and answered, "My friend, each and every one of these men told you what was indeed so; but few of us are able to add fact to different fact and make a truth thereof."

from The Wanderer: His Parables and Sayings, Kahlil Gibran, Alfred A. Knopf, Inc., New York, 1932.

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INTRODUCTION

One of the key concepts in the study of intergroup relations is attitude. Attitudes are influenced by many factors - among these are personal frustrations, ignorance, tradition, lack of contact and attitudes of one's reference group. The influence of each of these respective factors upon attitudes is not too well understood. Continuing research is needed to determine the relative importance of each of these factors. This thesis is the report of an attempt to examine the relationship between some of these factors and attitude by studying attitudes toward a particular ethnic group in South Dakota.

Scientific study of intergroup relations - as all other phenomena - is impossible except in specific contexts. South Dakota is the home of a unique ethnic group which could be used as the subject for much research, not only in the field of intergroup relations but also in other areas of sociological interest. The social scientist assumes that there are processes and structural elements common to all specific cases of social interaction which are objectively determinable and which can be generalized from the specific to the generic. On the basis of this assumption the study of the factors influential in this particular case of ethnic relations should make a contribution to scientific knowledge about intergroup relations in general.

The little-known ethnic group in South Dakota which can be studied for these purposes is a religious sect of European origin whose way of life and cultural traditions sharply differentiate its members from the people in the communities in which they live. In this paper, as in com-

mon usage, they are called "Hutterites," although in other formal accounts they are frequently referred to as "Hutterite Brethren," "Hutterian Brethren" or "Hutterische Brueder."

History and Description of the Hutterites

A review of the historical background of the Hutterites bears little relevance to this research which is concerned with the relationship between ethnic attitudes and a selected number of the previously-mentioned factors. It is sufficient to state here that the Hutterites originated in Moravia in 1528 as part of the Anabaptist movement within the Protestant Reformation. They suffered persecution from both Church and State for 150 years until at the end of that time they finally found peace in Russia for a century. In 1874 they came to the United States and settled in what was then Dakota Territory near Yankton. Because of their high rate of natural increase, the number of colonies grew from the three immigrant settlements to about twenty by 1918. Local hostility during World War I because of their conscientious objection and German heritage stimulated an emigration to Canada which left only one colony in South Dakota in 1934.

At the present time there are seventeen Hutterite colonies incorporated in South Dakota under the Communal Corporations Act of 1935. Another is operating under a type of trusteeship arrangement. Approximately 1900 Hutterite people live in the eighteen colonies which are scattered through eastern South Dakota.¹

¹Marvin P. Riley and David T. Priestley, "Agriculture on South

Their way of life is based upon religious principles which were integrated, standardized and codified over 400 years ago by their early leaders - among them Jacob Hutter from whom they were given their name. The "Hutterite way" is characterized primarily by their communal living and is integrated around their church. The individual colony member has no personal property; everything is possessed by the colony. Disposition and distribution of goods is made by leaders elected by the male members of the church; a colony operates as a sort of democratic patriarchy.

They are a separatist group, living apart from the outside world in communal villages called colonies which are located on the agricultural lands they farm to obtain their living. They engage not only in large-scale production of agricultural products but also raise large numbers of livestock and poultry. Although they try to buy most of their material and goods wholesale, the Hutterites maintain their traditional self-sufficiency by utilizing their own produce, making their own repairs and constructing their own buildings and equipment whenever possible.

Their separation is not only physical. Religious principles which prohibit extensive contact with their neighbors and with American culture also keep them isolated. Religious proscriptions concern radio and television; the influence of newspapers and magazines is probably limited; attendance at shows, dances and other such worldly entertainment is strictly forbidden. Conspicuous consumption is precluded by their principles of austerity and simplicity of living which keep their wants at a

minimum. Children are inculcated with these Hutterite values and practices by formal training which begins before the children enter grade school. The Hutterites dress in the styles of more than a century ago and retain the peculiar Germanic dialect of their forefathers.

The Hutterites engage in little, if any, political activity. Their conscientious objection has throughout their history caused much antagonism against them. Presently, their young men, so long as they remain at home, are exempt from military service although they are eligible for two years of mandatory employment by the state Game, Fish and Parks Service in the Black Hills. Taxes, relatively, are low because of little personal property, exemptions due to large families, and rather high overhead expenses in their operations.

In summary, the Hutterite way of life is radically different from that to which their neighbors are accustomed. Without presupposing that differences as such cause prejudice, each of the characteristics mentioned above have been strongly criticized by those who live about them. The Hutterites thus represent an excellent focal point for the study of some problems in the understanding of intergroup relations which remain yet unsolved for the sociologist. A number of these problems which will be examined in this thesis are introduced in the following paragraphs following which the problem will be specifically stated.

Justification for the Study

In the field of intergroup relations there is much information and theory of a tentative nature. Many studies have been made to arrive at our present stage of knowledge about this social phenomenon; many

more must be conducted before the human understanding of intergroup relations is substantial enough for reliable prediction and successful action programs.

One problem which needs much clarification regards the nature of prejudice. Robin M. Williams, Jr., writes: "furthermore, although prejudice is often analyzed as if it were a unitary phenomenon . . . we are not yet convinced that this basic assumption has been proven valid."² Empirical studies seem to have validated Williams' objection, and theorists have developed a schema by which attitudes can be analyzed.³ However, additional questions can be raised regarding this analytical construct; primarily, what is the relationship between the various attitudinal components which the theorists include in their construct?

Harding, et al., state in their review of research on intergroup relations that

. . . the relationship among the various attitudinal components is so close that it does not make much difference in practice whether we use cognitive, affective, or conative tendencies to rank individuals with respect to their attitudes toward any specific ethnic group.⁴

Earlier, however, they make an apparently contradictory statement:

. . . the degree of correlation between two attitudinal measures seems to depend more on similarity in the measurement techniques used than it does on the attitudinal content

²Robin M. Williams, Jr., The Reduction of Intergroup Tensions, Social Science Research Council Bulletin #57, Social Science Research Council, New York, 1947, p. 38.

³The "Theoretical Framework" of this thesis contains a summary of this point.

⁴John Harding, et al., "Prejudice and Ethnic Relations," in Handbook of Social Psychology, vol. 2, 1930, Gardner Lindzey, ed., Addison-Wesley Publishing Company, Inc., Cambridge, Mass., 1954.

these techniques are intended to tap.⁵

Nowhere in the literature examined for this study does there exist a clear discussion of this dilemma or any suggestion for the resolution of it. A study of attitudes toward the Hutterites offers the opportunity to clarify somewhat the relationship between the various attitudinal components and to perhaps suggest an answer to the question.

Williams also indicates a number of "premises which appear to operate in the selection of methods and techniques in actual programs," assumptions "yet to be empirically confirmed."⁶ Two of these premises are especially applicable to the Hutterite situation where "empirical confirmation" for them may be found.

The first of these assumptions which will be examined in the present situation of tensions between South Dakota's Hutterites and their neighbors states that "'contact brings friendliness.' This is the extreme and unqualified phrasing of a general assumption manifest in a great many current activities."⁷ As a qualification Williams suggests that intimacy of contact may be more influential in the formation and maintenance of ethnic attitudes than simple frequency of contact.⁸ A study of the Hutterite situation offers the possibility of empirical confirmation of this premise and its suggested qualification.

⁵Ibid., p. 1029.

⁶Williams, op cit., p. 13.

⁷Ibid., p. 15.

⁸Ibid., p. 70.

The second assumption Williams describes in the following manner:

"One of the most obvious of these premises guiding strategy is, in its least sophisticated formulation, 'Give people the facts and prejudice will disappear.'"⁹ The relationship between attitude and knowledge is often postulated but only tenuously supported. This study is intended to add further evidence to the great mass which must be collected before this premise is proven or disproven.

The sociological study of intergroup relations and ethnic attitudes suggests the possible importance and applicability of reference group theory to the understanding of such situations. A study of the Hutterites of South Dakota and their relations with their neighbors would make it possible to determine the significance of at least three factors which can be subsumed under reference group theory:

(1) Recognizing that attitudes are held, developed and expressed in social contexts, a more complete understanding of ethnic prejudices should be made possible by taking into consideration the influence of other persons upon one's own attitudes. In the case of the Hutterites the importance of this influence can perhaps be studied.

(2) The second concept subsumed under reference group theory and testable in the Hutterite situation is relative deprivation. The utility of this concept is not yet known, and the present research should contribute to the assessment of the applicability of the concept.

(3) Also subsumed under reference group theory is W. I. Thomas'

⁹Ibid., p. 13.

theorem: "If men define situations as real, they are real in their consequences." Related to this is the effect of how men define an ethnic group upon their attitudes toward it. The Hutterite situation makes it possible to further specify the relationship between these two variables.

Statement of the Problem

A study of attitudes toward the Hutterites of South Dakota provides an opportunity to test the relationships implied in the problems stated briefly above. Work needs to be done to refine the knowledge of intergroup relations which presently exists and to further validate or repudiate presently accepted ideas and hypotheses related to intergroup relations. Generally stated, the problem with which this research is concerned is:

what relationships, if any, exist between the attitudes of their neighbors toward the Hutterites and the following selected factors: contact, knowledge, opinion leaders, neighbors' feelings of deprivation relative to the Hutterites, and neighbors' definition of the Hutterites.

These factors are chosen primarily to test features of the previously-mentioned assumptions and to assess the applicability of some aspects of reference group theory to the study of intergroup relations. This study is also intended to contribute to the development of a theoretical framework within which intergroup relations can be studied. Williams points out the need for such work in the following statement:

A high percentage of the pages printed concerning the subject are so heavily "empiricist" that no analytical propositions can be extracted from them. But in the midst of the continuing flood of description-without-hypothesis we increasingly find studies which focus upon the antecedent-

consequent relations of explicitly defined variables and are able to put a clear question to Nature.¹⁰

This study presumes to be an attempt to "focus upon the antecedent-consequent relations of explicitly defined variables." Its merit will undoubtedly lie in the theoretical presentation rather than the empirical report; but both, it is hoped, will make possible the better understanding of intergroup relations and ethnic attitudes.

Review of Literature about the Hutterites

The study of the Hutterites and their community relations is greatly complicated by the lack of objective information about them. The earliest known sociological study of the Hutterites was conducted in the 1920's by Lee Emerson Deets, then at the University of South Dakota. Two major publications resulted from his study of the sect. The first was written in 1931 and published as a paper of the American Sociological Society.¹¹ Without directly suggesting their imminent disintegration, Deets points out three "origins of conflict:" (a) the natural enmity between the family and the community, (b) the desire for money, and (c) the breakdown of isolation.¹² In his doctoral dissertation,¹³ Deets

¹⁰Robin M. Williams, Jr., "Racial and Cultural Relations," in Review of Sociology, Joseph H. Gittler, ed., John Wiley & Sons, Inc., New York, 1957, p. 455.

¹¹Lee Emerson Deets, "The Origins of Conflict in the Hutterische Communities," Publications of the American Sociological Society, vol. 25, 125-135, American Sociological Society, Albany, N.Y., 1931.

¹²Ibid., p. 125.

¹³Lee Emerson Deets, The Hutterites: A Study in Social Cohesion, Ph. D. dissertation, Columbia University, 1939.

was concerned with Hutterite social cohesion which he attributed primarily to (a) a hard core of central beliefs around which their whole way of life is integrated, (b) strong individual self-discipline developed through a rigid system of formal training and (c) their genetic and environmental homogeneity.¹⁴ Although there can be no doubt of the accuracy or quality of Dr. Deets' work, he did not begin to exhaust the Hutterites as a source of sociological knowledge.

In 1948 the Canadian Mental Health Association reported a study of the developing relations between two newly-established Hutterite colonies in southwestern Saskatchewan and the communities near which they had settled.¹⁵ Not too well structured, the study's primary significance lies in the observation that economic frustrations had begun to stimulate scapegoating of the Hutterites. The Association was not concerned with studying the dynamics of intergroup relations but with obtaining empirical bases for instituting an action program to forestall the development of tensions and conflict.

A Wayne University research team conducted a study in the early 1950's "to explore the relatively neglected social and cultural aspects of mental health and mental disorders."¹⁶ Four papers and books reporting their methods and findings are of major importance. The earliest of these

¹⁴Ibid., pp. 60-63, passim.

¹⁵Canadian Mental Health Association (Saskatchewan Division), The Hutterites and Saskatchewan, Regina, Saskatchewan, 1953.

¹⁶Joseph W. Eaton and Robert J. Weil, Culture and Mental Disorders, The Free Press, Glencoe, Ill., 1955, p. 208.

was an article by Joseph W. Eaton, sociologist and director of the study.¹⁷ He defines the distinctive pattern of social change among the Hutterites as a process of "controlled acculturation." He describes the gradual nature of social change among the Hutterite colonies and "the institutionalized techniques that have been developed to deal with pressure for change in an organized fashion."¹⁸ Social changes are made only when internal pressures threaten the imminent breakdown of their social order. A demographic report describing their reproduction, mortality, natural increase, age and sex distribution and related population theory was published in 1954.¹⁹ The primary report of the study concludes: "Our findings do not confirm the hypothesis that a simple and relatively uncomplicated way of life provides virtual immunity from mental disorders."²⁰ After a comparison of Hutterite mental health with the results of nine other studies conducted in Scandinavia, central Europe, Formosa and the United States, the specific characteristics of the psychoses, psycho-neuroses, mental deficiency, epilepsy, personality disorders and social disorganization of the Hutterites are described. Hutterite cultural values were shown to influence the symptom patterns of the mentally ill in their society. Somewhat besmirched by such findings, the Hutterites' reputation for good

¹⁷Joseph W. Eaton, "Controlled Acculturation: A Survival Technique," *American Sociological Review*, vol. 17, 331-340, American Sociological Society, Albany, N.Y., 1952.

¹⁸*Ibid.*, p. 334.

¹⁹Joseph W. Eaton and Albert J. Mayer, *Man's Capacity to Reproduce*, The Free Press, Glencoe, Ill., 1954.

²⁰Eaton and Weil, *op cit.*, p. 249.

mental health is nevertheless greatly validated by this study. A monograph written by the two psychologists on the research team which describes "communal personality" was published a year later.²¹ This book purported to be "a description and analysis of the personalities of a large sample of more or less 'normal' Hutterites."²² With the use of Thematic Apperception and Sentence Completion Tests the writers analyze the content of Hutterite personality and conclude: "The general picture of conformity and harmony which is so striking in the behavior of adult Hutterites is not paralleled by a similar harmony at the level of personality."²³ They do not claim, however, that Hutterites have especially poor mental health; only that mental health problems do exist. A rather detailed discussion of the depression neurosis characteristic of the Hutterites - anfechtung - is included in their paper.

A sociological study is presently being conducted at South Dakota State College. This research is concerned with determining the present social and economic organization of Hutterite colonies in South Dakota, the socio-economic effects of this type of farm on the rural community and the attitudes of their neighbors and local businessmen toward these communal farmers. Two quarterly articles have been published from materials gathered under this project and an Experiment Station bulletin is

²¹Bert Kaplan and Thomas F. A. Plaut, Personality in a Communal Society, University of Kansas Publications, Lawrence, Kan., 1956.

²²Ibid., p. 2.

²³Ibid., p. 104.

presently anticipated.²⁴

During the writing of this report, reference was discovered to two Master's theses about the Hutterites - one was written at the University of Alberta in 1949;²⁵ the other, at Montana State University in 1958.²⁶ The first, which has little value even for the historian, covers the history of the Hutterites from 1528 to the present using as its primary source the Hutterites' own history.²⁷ The Montana thesis includes an extensive and valuable discussion of Hutterite history, religious faith, culture, social organization and education. The study compares the achievement of Hutterite students as measured by the California Achievement Test with that of non-Hutterite students in centralized schools. "Data from this particular testing program appears to indicate that the Hutterian students in grades four, five, and six do not attain the standards set by the students of grades four, five, and six in the centralized schools."²⁸

²⁴Marvin P. Riley, "Communal Farmers: the Hutterite Brethren," South Dakota Farm and Home Research, vol. 8, 5-11, Agricultural Experiment Station, South Dakota State College, College Station, Brookings, South Dakota, 1956-1957. Also, Riley and Priestley, op cit., pp. 12-16.

²⁵Edwin L. Pitt, The Hutterian Brethren in Alberta, M.A. thesis, University of Alberta, 1949.

²⁶William Douglas Knill, Hutterian Education: A Descriptive Study Based on the Hutterian Colonies within Warner County No. 5, Alberta, Canada, M. A. thesis, Montana State University, 1958.

²⁷A. J. F. Zieglschmidt, ed., Das Klein-geschichtsbuch der Hutterischen Brueder, Carl Schurz Memorial Foundation, Philadelphia, 1947.

²⁸Knill, op cit., p. 148.

Professional articles with a sociological orientation were published in 1924,²⁹ and in 1946.³⁰ In addition to their own records³¹ and the brief history of the Hutterites which the Mennonite Historical Society published in English in 1931,³² two articles on the history of the Hutterites have appeared in the South Dakota Historical Collections - one in 1920,³³ the second in 1951.³⁴

The concern of all of these writers has not been primarily with the study of the Hutterites as a problem in intergroup relations. Implications for this type of study are found in each of the references cited, but their immediate concern has been of a different nature. The Canadian Mental Health Association approached this area but their study was action oriented. The research reported here is an attempt to study some of the theoretical questions relevant to intergroup relations using the Hutterites as the subject of the inquiry.

²⁹Bertha Clark, "The Hutterian Communities," The Journal of Political Economy, vol. 32, 357-374, 468-486, University of Chicago Press, Chicago, 1924.

³⁰Marie Waldner, "The Present Day Social Customs and Cultural Patterns of the Hutterites in North America." Fifth Annual Cultural Conference Proceedings, The Berne Witness, Berne, Ind., 1946, pp. 45-59.

³¹Zieglschmidt, op cit.

³²John Horsch, The Hutterian Brethren: 1528-1931, The Mennonite Historical Society, Goshen, Ind., 1931.

³³Gertrude S. Young, "The Mennonites in South Dakota," South Dakota Historical Collections, vol. 10, 470-506, South Dakota Historical Society, Pierre, 1920.

³⁴Norman Thomas, "The Hutterian Brethren," South Dakota Historical Collections, vol. 25, 265-299, South Dakota Historical Society, Pierre, 1951.

THEORETICAL FRAMEWORK

Introduction

The Hutterites with their neighbors present a picture of two groups living side-by-side who find it necessary to establish some kind of modus operandi for the relationships which the members of each have with members of the other. In many instances there would be little difficulty in arriving at such a working arrangement because the members of the two groups would be quite similar in behavior and values. The Hutterites, however, not only occupy a minority status in the localities in which they have settled but also constitute a unique ethnic group. The definition at this point of three terms which have already been introduced will help to clarify the succeeding discussion.

An ethnic group, according to Talcott Parsons, is "a group possessing continuity through biological descent whose members share a distinctive social and cultural tradition."³⁵ In this sense the Hutterites are an ethnic group. Louis Wirth characterizes a minority as "a group of people who, because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differ-

³⁵Talcott Parsons, "Racial and Religious Differences as Factors in Group Tensions," in Approaches to National Unity, Lyman Bryson, Louis Finkelstein and Robert M. MacIver, eds., Conference on Science, Philosophy and Religion, New York, 1945, p. 186. This definition is almost identical to the one given in Williams, 1947, p. 42.

ential and unequal treatment"36 They "are held in lower esteem and may even be objects of contempt, hatred, ridicule, and violence."37

The groups of which they are members provide men with a frame of reference within which their actions are meaningful and satisfying. One's social frame of reference constitutes, as it were, the way in which one views the world around himself. The groups of which we are members provide us such frames of reference or, in other words, serve as "reference groups" for us.

However, ". . . any of the groups of which one is a member . . . as well as groups of which one is not a member . . . can become points of reference for shaping one's attitudes, evaluations and behavior."38 In the field of intergroup relations the concept of the reference group provides the sociologist with a tool for uncovering the relationships between otherwise anomalous findings.

. . . reference group theory aims to systematise the determinants and consequences of those processes of evaluation and self-appraisal in which the individual takes the values or standards of other individuals and groups as a comparative frame of reference.39

The importance of reference group theory will be brought out more explicitly in a succeeding section.

36Louis Wirth, "The Problem of Minority Groups," in The Science of Man in the World Crisis, Ralph Linton, ed., Columbia University Press, New York, 1945, p. 347.

37Ibid., p. 348.

38Robert K. Merton, Social Theory and Social Structure, rev. ed., The Free Press, Glencoe, Illinois, 1957, p. 233.

39Ibid., p. 234.

Attitudes

The dependent variable for the present study around which all else is organized is the attitudes of neighbors toward the Hutterites. An examination of the concept of attitude is necessary before any consideration is given to postulating any relationships between this variable and the others later to be discussed.

There seems to be widespread agreement on the definition of the term "attitude." The most concise is that used by Newcomb: "an individual's attitude toward something is his predisposition to perform, perceive, think, and feel in relation to it."⁴⁰ As a general term, attitude can be used in many contexts. The particular context in which the term is used in the present study is identified when we specify that it is an ethnic attitude, i.e., an attitude held toward members of an ethnic group (in this case, the Hutterites of South Dakota.)

Frequently, when reference is made to an ethnic attitude, it is called "prejudice." Although there is not complete agreement about the definition of the term, it seems that usually prejudice is defined as "a negative ethnic attitude."⁴¹ It is in this sense that the term prejudice is used in the succeeding discussion.

The attitudes which one holds are not entirely his own, nor are

⁴⁰Theodore M. Newcomb, Social Psychology, The Dryden Press, New York, 1950, pp. 118-119.

⁴¹Muzafer Sherif and Carolyn W. Sherif, Groups in Harmony and Tension, Harper & Bros., New York, 1953, p. 76. Cf. also, Harding, op cit., p. 1022; Williams, 1947, p. 42.

they privately possessed. Attitudes are developed in social contexts.

They are expressed in social contexts. Ethnic attitudes may comprise part of a community's norms just as do colloquial expressions, foods and recreational practices.

Prejudice is learned, just as culture in general is learned. Indoctrination and habituation . . . are thus responsible also for inculcating patterns of prejudice and of discrimination, when these too are a part of the culture.⁴²

Group prejudice may be characterized as the negative attitude of members of one group, derived from the group's established norms, toward another group and its members.⁴³

It is necessary to recognize that to a large extent inter-group attitudes form part of American cultural norms. . . . In most American subcultures and in most social groups individuals face a good deal of disapproval if they do not have the 'right' ethnic attitudes. The pressures toward conformity are often very subtle, but they are very real.⁴⁴

Attitudes which comprise a part of community norms are inculcated as a part of the process of socialization. Due to changes in community structure and/or membership, previously non-normative attitudes may develop and be integrated into community expectations.

This is not to say, of course, that all attitudes are part of the normative order. A community may not define an ethnic group as problematic or undesirable so attitudes toward it will not become a matter of public consideration. At the same time, individuals within the community may possess very definite prejudices toward some segment of the community

⁴²Robert Bierstadt, The Social Order, McGraw-Hill Book Co., Inc., New York, 1957, p. 456, underlines added.

⁴³Sherif, op cit., p. 76, underlines added.

⁴⁴Harding, op cit., p. 1038, underlines added.

population. However, in communities where definite ethnic attitudes exist one would expect to find a high degree of expressed agreement with the community norms on the subject.

Another qualification must be stated here: the attitudes which one expresses are not necessarily one's actual feelings. This has been well demonstrated by Richard T. LaPiere.⁴⁵ LaPiere traveled up and down the Pacific Coast with a Chinese couple, who were refused lodging only once. Upon their return to Stanford University, Professor LaPiere wrote to the proprietors of the inns and hotels where they had stayed and inquired whether they would accept Chinese guests. Most of them replied that they would not. On the basis of such experiences most sociologists accept as proven the proposition that the expressed (or public) attitudes are not necessarily the actual (or private) attitudes. In any study of prejudice, then, there is the difficulty of determining if the attitudes expressed to the field worker are the attitudes the respondent actually feels.

The measurement of attitude is further complicated by the nature of the phenomenon itself. Williams early raised the question whose answer has greatly influenced theory in the field of intergroup relations, especially in reference to prejudice. ". . . Although prejudice is often analyzed as if it were a unitary phenomenon . . . we are not yet convinced that this basic assumption has been proven valid."⁴⁶ Bernard Kramer, fol-

⁴⁵Richard T. LaPiere, "Attitudes versus Actions," Social Forces, vol. 13, 230-237, University of North Carolina Press, Chapel Hill, 1934.

⁴⁶Williams, 1947, p. 38.

lowing Williams' lead, later wrote:

. . . prejudice is composed of many aspects, categories or dimensions and . . . an effective program of research should be based on the differentiated dimensions which must be arrived at through careful examination of the concrete phenomenon of prejudice.⁴⁷

Much more recently, Harding and his collaborators record a developed consensus on the subject:

There is now considerable agreement among investigators as to the major psychological processes necessary for the adequate conceptualization of intergroup attitudes. In general, such attitudes can best be described in terms of their cognitive, affective, and conative components.⁴⁸

Because this trichotomy has been adopted for the present study, its three elements must be clarified for the reader. Harding, et al., introduce their discussion of the three components of attitudes in the following manner:

Much of the research on the cognitive aspects of intergroup attitudes has been focussed on the problem of determining the most widely held beliefs about various ethnic groups, i.e., group stereotypes.⁴⁹

Kramer breaks this cognitive component into two parts - the first can be termed the "stereotype;" the second, "conceptions." "The cognitive level of orientation refers, firstly, to the individual's picture of the minority group;"⁵⁰ or, in Walter Lippmann's vivid phrase, stereotypes are the

⁴⁷Bernard M. Kramer, "Dimensions of Prejudice," Journal of Psychology, vol. 27, 389, The Journal Press, Provincetown, Mass., 1949.

⁴⁸Harding, op cit., p. 1023.

⁴⁹Ibid., p. 1023.

⁵⁰Kramer, op cit., p. 393.

"pictures one carries around in his head" of the members of an ethnic group.

Kramer continues:

Another aspect of the cognitive level of orientation concerns the type of cognitive processes characterizing the individual's beliefs about minority groups (as distinct from the particular characteristics attributed by the individual to the minority group).⁵¹

Conceptions are further defined as those dimensions of cognitive orientation "that do not involve a specific 'picture' of the minority group, but refer to a cognitive or thought process in reference to a minority group."⁵²

Members of the ethnic group act as stimuli which evoke emotions in the prejudiced individual. These emotional reactions comprise the second component of an ethnic attitude.

. . . Reactions toward minority group members involve not only beliefs but feelings as well, i.e., affective components In fact, this has been the trend in ethnic attitude measurement: attempts to determine the individual's over-all feeling towards a particular group, in terms of the direction and intensity of such feeling.⁵³

The third attitudinal dimension as conceived by these theorists is the conative component.

Where the individual is emotionally predisposed toward a particular ethnic group, one may expect to find an accompanying conative or policy orientation, i.e., a pattern of beliefs about the way in which members of that group should be treated in specific social contexts.⁵⁴

Social distance refers to the degree of intimacy to which an individual

⁵¹Ibid., p. 394.

⁵²Ibid., p. 396.

⁵³Harding, op cit., p. 1025.

⁵⁴Ibid., p. 1027.

will admit members of another group. This concept is an important part of the conative dimension of attitude as verified by Harding's reference to Kramer: "In this category Kramer includes acceptance of other individuals in various personal and social relationships (social distance) . .

. . .⁵⁵

Attitudes (predispositions to perform, perceive, think and feel) are characterized for the present study as being comprised of three dimensions. The first is the cognitive component - the stereotypes one holds of the ethnic group members and the conceptions one has about them. Second, the affective component is that dimension which describes a person's emotional reaction (e.g., fear, succorance) to the stimulus of ethnic group members. The conative component defines what the individual thinks should be done about the ethnic group; it is action oriented. For the present study attitudes are considered in terms of this trichotomy.

The following sections discuss in some detail the theoretical background on the basis of which relationships are postulated between attitudes toward the Hutterites and the independent variables mentioned in the "Statement of the Problem." These variables are also nominally defined at the same time. The first one to be considered is "contact."

Contact

Social interaction "is the fundamental category to which the count-

⁵⁵Ibid., p. 1027.

less ways of people . . . are reducible."⁵⁶ It constitutes a basic concept in sociology in terms of which all social phenomena can be considered. P. A. Sorokin defines interaction as "any event by which one party tangibly influences the overt actions or the state of mind of the other."⁵⁷ Earlier, it was said that attitudes are developed, learned and expressed in social contexts. On the basis of the above definition of interaction it can be stated that attitudes are a product of social interaction and are expressed in social interaction situations. To consider attitudes otherwise would seem to render the concept meaningless.

"Intergroup relations" implies interaction between members of two groups. Frequently, the term "contact" is used to refer to these relations, and this usage has been adopted in this paper. In this sense, contact means simply "an interaction situation," an "event," in Sorokin's terminology. Because of the importance of interaction in the formation and expression of attitudes, the influence of contact on ethnic attitudes becomes a crucial problem.

In the "Justification for the Study" the assumption that contact brings friendliness was mentioned. Arnold Rose takes this position when he states: "It was found that the degree of prejudice was directly related to frequency of personal contact, but inversely related to intimacy of personal contact."⁵⁸ George Homans states the hypothesis very explicitly:

⁵⁶Logan Wilson and William L. Kolb, Sociological Analysis, Harcourt, Brace and Co., New York, 1949, p. 681.

⁵⁷P. A. Sorokin, Society, Culture and Personality, Harpers & Bros., New York, 1947, p. 40.

⁵⁸Arnold M. Rose, Studies in Reduction of Prejudice, American Council on Race Relations, Chicago, 1947, p. 13.

"If the frequency of interaction between two or more persons increases, the degree of their liking for one another will increase, and vice versa."⁵⁹

Although his objection has served as part of the justification for this study, Williams recently stated:

In the Cornell Studies of Intergroup Relations, it was found that frequency of interaction with members of an out-group was closely associated with favorable attitudes (or lack of negative prejudice) towards persons in that social category. This finding was replicated in fourteen different surveys. . . . In any case, within quite wide limits, the more we interact with a particular person, the greater the likelihood of positive attraction.⁶⁰

Although he takes the opposition, Gordon Allport recognizes that many people do assume a relationship between attitude and contact:

It has sometimes been held that merely by assembling people without regard for race, color, religion, or national origin, we can thereby destroy stereotypes and develop friendly attitudes.⁶¹

Continuing the above quotation, Allport objects to this assumption.

The case is not so simple. Yet somewhere there must be a formula that will cover the fact reported by Lee and Humphrey in their analysis of the Detroit race riot of 1943:

People who had become neighbors did not riot against each other. The students of Wayne University - white and black - went to their classes in peace throughout Bloody Monday. And there

⁵⁹George C. Homans, The Human Group, Harcourt, Brace and Co., New York, 1950, p. 112.

⁶⁰Robin M. Williams, Jr., "Continuity and Change in Sociological Study," American Sociological Review, vol. 23, pp. 624-625, American Sociological Society, Albany, N.Y., 1958.

⁶¹Gordon W. Allport, The Nature of Prejudice, Addison-Wesley Publishing Company, Inc., Cambridge, Mass., 1954, p. 261.

were no disorders between white and black
workers in the war plants⁶²

Further support for an objection to an assumed relationship between attitude and contact comes from I. D. MacCrone:

Closeness of contact, or familiarity as such, between groups will not necessarily lead to a reduction in social distance between the individual members Such familiarity . . . will only lead to an increase in social distance.⁶³

From these quotations it is apparent that there is a need for the empirical confirmation of the relationship between these two variables which is now assumed. The hypothesis which posits this premise states in the null form:

ethnic attitudes are not significantly related to the frequency of contact with members of the ethnic group.

Informal observation of the Hutterite situation made previous to this survey suggests a qualification of the above hypothesis which both Allport and Williams mention. It is not so much the frequency of contact as it is the type or intimacy of contact an individual has with the members of an ethnic group that is significantly related to his attitude. Allport says:

Whether or not the law of peaceful progression will hold seems to depend on the nature of the contact that is established Obviously, the effect of contact will depend upon the kind of association that occurs⁶⁴

⁶²loc cit. The quoted material is from A. M. Lee and H. D. Humphrey, Race Riot, The Bryden Press, New York, 1943, p. 130.

⁶³I. D. MacCrone, Race Attitudes in South Africa, Oxford University Press, London, 1937, p. 178. Quoted in Williams, 1947, p. 70.

⁶⁴Allport, op cit., p. 262.

Williams concurs: "In personal contacts between members of different racial, ethnic, or religious groups, the effects upon the prejudice-hostility level will be contingent in part upon . . . the 'intimacy' of contact" ⁶⁵ If, then, the interaction between members of two groups is intimate, personal and primary rather than distant, impersonal and secondary, their attitudes toward each other will tend to be favorable. In null form it is hypothesized that:

ethnic attitudes are not significantly related to the intimacy of contact with members of the ethnic group.

This proposition is expected to be rejected in the null form for the reasons given in the preceding discussion.

Knowledge

The second assumption which needs empirical confirmation is the one Williams phrased: "Give people the facts and prejudice will disappear." Although Williams questions this assumption, one must admit that the effect of knowledge about an ethnic group on the attitudes of others toward it is important in the understanding of intergroup relations. Knowledge is defined as the amount of information about an ethnic group possessed by members of the larger society. Before considering the effects of inaccurate information, consideration will be given to the relationship between ethnic attitudes and accurate knowledge about the ethnic group.

Accurate Knowledge

The question of the relationship between these two variables has

⁶⁵Williams, 1947, p. 70.

been considered by other investigators. Williams summarizes some of this research by stating that "favorable attitudes and the extent of information about given groups are positively, but slightly, correlated; effects are not clearly proven in detail but the general evidence is positive."⁶⁶ In papers discussing the reduction of intergroup tensions (e.g., Rose⁶⁷ and Williams⁶⁸) it seems to be assumed that the dissemination of information about an ethnic group will reduce tensions which exist toward it - that knowledge is positively correlated with attitude. However, quite extreme prejudices may be held even though the individual is seemingly rather well acquainted with an ethnic group. A simple relationship between attitude and knowledge cannot be postulated; therefore, the null hypothesis would state that

ethnic attitudes are not significantly related to the amount of accurate knowledge non-members possess about an ethnic group.

If the data conform to the expectation given by the presentation above, this null form of the hypothesis should be accepted.

Inaccurate Knowledge

An apparently universal characteristic of intergroup relations is the tendency for prejudiced persons to justify their attitudes by attrib-

⁶⁶Ibid., p. 64.

⁶⁷Rose, op cit.

⁶⁸Williams, 1947; also Williams, 1957. Cf. Allport, op cit., pp. 485-488.

uting abnormal traits and practices to the objects of their prejudice. This "knowledge," although inaccurate, still forms a part of the informational pattern possessed by the individual. Experience has shown that prejudiced persons will deny the obvious truth, preferring rather the distorted lie. When this element is introduced into the search for the equation stating the relationship between knowledge and attitude, a number of questions arise. Does the prejudiced person accept a greater number of falsehoods about the ethnic group as being true than does the person with neutral or favorable attitudes? Does the prejudiced mind select and retain only those bits of information which justify his prejudice? Does knowledge influence attitude; or attitude, knowledge?

Although from the quotation from Williams a strong correlation between knowledge and attitude would not be expected, observation would lead us to expect that inaccurate knowledge would be correlated with ethnic attitude. The hypothesis stating such a relationship would read in null form:

ethnic attitudes are not significantly related to the amount of inaccurate knowledge non-members possess about an ethnic group.

The preceding discussion suggests that the null hypothesis will be rejected. The difficulties of measuring other logical relationships suggested by the questions above preclude any further hypothesization in reference to ethnic attitude and knowledge.

Reference Group Theory

Although it is referred to as "reference group theory," this approach appears to be more in the nature of a "general sociological orien-

tation," to use Merton's term.⁶⁹ Even with such limitations, however, there are definite types of social and social psychological phenomena which can be subsumed under the term "reference group theory." Merton, in his discussion of this subject, clarifies the concept of reference group in this way:

That man act in a social frame of reference yielded by the groups of which they are a part is a notion undoubtedly ancient and probably sound. Were this alone the concern of reference group theory, it would merely be a new term for an old focus in sociology, which has always centered upon the group determination of behavior. There is, however, the further fact that men frequently orient themselves to groups other than their own in shaping their behavior and evaluations, and it is the problems centered about this fact of orientation to non-membership groups that constitute the distinctive concern of reference group theory.⁷⁰

Sherif defines reference groups "as those groups to which the individual relates himself as a part or to which he aspires to relate himself psychologically."⁷¹ Such groups can thus be seen to have a potential influence upon the attitudes of persons for whom they provide a frame of reference for self-evaluation or behavioral patterns.

Technically, the term reference group is inaccurate, as Merton explains: ". . . the now-established term 'reference group' is something of a misnomer. For the term is applied not only to groups, but to individuals and to social categories as well."⁷² Nevertheless, because of its general

⁶⁹Merton, op cit., pp. 9, 87-89.

⁷⁰Ibid., p. 234.

⁷¹Sherif, op cit., p. 161.

⁷²Merton, op cit., p. 284.

adoption, the term "group" is still used. Following the precedent of previous work by others, Merton distinguishes between two functionally different types of reference groups:

. . . the first is the "normative type" which sets and maintains standards for the individual and the second is the "comparison type" which provides a frame of comparison relative to which the individual evaluates himself and others. The first is a source of values The second is instead a context for evaluating the relative position of oneself and others The two types are only analytically distinct, since the same reference group can of course serve both functions.⁷⁵

Reference group theory is applicable to the study of intergroup relations in at least three ways. First, other people are frequently used as frames of reference for the formation of one's own attitudes toward an ethnic group. Such persons may be called "opinion leaders." Second, the concept of relative deprivation, because of its emphasis upon the comparisons one makes between his own situation and that of others, definitely falls within the province of reference group theory. Third, the terms in which a person defines an ethnic group are expected to influence his attitudes toward it, or so the processes implied in reference group theory would suggest. These three aspects of reference group theory will be expanded in the succeeding discussion which begins with the presentation of the concept of the opinion leader.

Opinion Leaders

As has been asserted before, attitudes are learned, developed and

⁷⁵Ibid., p. 283-284.

expressed in social contexts, in situations of interaction. Considered in this sense, it is readily understood that the attitudes of people are especially influenced by those persons they consider authorities on the issue. Lazarsfeld, Berelson and Gaudet call such authorities "opinion leaders."

. . . For every public issue there are certain people who are most concerned about the issue as well as most articulate about it . . . "opinion leaders." . . . The opinion leaders are not identical with the socially prominent people in the community or the richest people or the civic leaders.⁷⁴

These leaders need not be aware of the influential position they have in affecting the opinions and attitudes of others on a subject in order to be effective. The informality of their position may well increase their effectiveness.⁷⁵ Whether their influence is conscious or unconscious, these leaders will be identified by persons in the community as "somebody who could tell you a lot about it." Loomis and Beegle call such an opinion leader a "natural neighborhood leader" and characterize him in the following manner:

He does not stand out as do the other kinds He is often a modest fellow, not particularly or at all conscious that he is a leader, and not always outstanding in his farming abilities, specialized knowledge, or other outstanding leadership traits. His leadership may appear latent, but

⁷⁴Paul R. Lazarsfeld, Bernard Berelson and Hazel Gaudet, "Informal Opinion Leaders and a National Election," in Studies in Leadership, Alvin W. Gouldner, ed., Harper & Bros., New York, 1950, pp. 118-119.

⁷⁵Charles P. Loomis and J. Allen Beegle, Rural Social Systems, Prentice-Hall, Inc., New York, 1950, p. 687.

the potential qualities of leadership are present though not always evident.⁷⁶

While discussing this type of leader, it is important to note that one's leadership on one public issue does not necessarily carry over into another area of concern. There may well be an opinion leader regarding school reorganization, another regarding agricultural price supports, a third regarding the Hutterites, and many more.⁷⁷

The significant point in examining the phenomenon of the informal opinion leader is that his "constituency" identifies him as an authority. He is not an opinion leader for those who reject his attitudinal position. For this reason the person whom one accepts as informed will undoubtedly have the greatest influence on one's own attitudes. In this regard, Lazarsfeld, Berelson and Gaudet indicate that there is a selection of the persons to whom one listens.⁷⁸ People can, and do, close their ears to the arguments and persuasions of those with whom they disagree. They will tend to reject as misinformation comments made by persons whose authority on the subject they do not accept.⁷⁹ From this it would be expected that there would be a rather close relationship between the attitudes one holds and the attitudes of the persons one accepts as opinion leaders in this regard.

⁷⁶Ibid., p. 686.

⁷⁷Merton, op cit., p. 327.

⁷⁸Lazarsfeld, Berelson and Gaudet, op cit., pp. 120-123, passim.

⁷⁹Bernard Berelson, Paul F. Lazarsfeld and William M. McPhee, "Political Perception," in Readings in Social Psychology, third ed., Eleanor E. Maccoby, Theodore M. Newcomb and Eugene L. Hartley, eds., Henry Holt and Co., New York, 1958, pp. 72-85, passim.

The following statement by Frank Hartung is offered in support of the rationale developed here:

Persons with hostile (or favorable) attitudes toward a particular group will tend to establish and maintain contact with others who share their attitudes, consequently these attitudes will tend to be maintained and reinforced.⁸⁰

This serves to further reiterate the importance of opinion leaders in the formation and reinforcement of ethnic attitudes. It would be expected that if for an individual there are specific others whose attitudes serve as a point of reference in attitude formation, the attitudes expressed by the individual and his referent will be very similar. It is expected that insofar as a person is identified as an opinion leader on a subject his attitudes will be accepted by other people as their own. It is therefore hypothesized that

ethnic attitudes are not significantly related to the attitudes of community opinion leaders toward the ethnic group.

The preceding theoretical presentation anticipates that the data will not support the null hypothesis stated above.

Concept of Relative Deprivation

The authors of *The American Soldier*⁸¹ employed a concept in their

⁸⁰Frank Hartung, "White Collar Offenses in the Wholesale Meat Industry in Detroit," *American Journal of Sociology*, vol. 56, 25-32, University of Chicago Press, Chicago, 1950-1951. Quoted in Williams, 1957, p. 440.

⁸¹This is the general name given a four-volume set describing some research in military sociology. The first two volumes give a report of the findings. The first is: Samuel A. Stouffer, et al., *Adjustment during Army Life (Studies in Social Psychology in World War II, vol. 1)*, Princeton University Press, Princeton, 1949. The second is: Samuel A. Stouffer, et al., *Combat and Its Aftermath (Studies in Social Psychology in World War II, vol. 2)*, Princeton University Press, Princeton, 1949.

analysis which is clearly related to reference group theory, but which they did not precisely define - the concept of "relative deprivation." It would appear from Merton's discussion of the concept that relative deprivation refers to the feeling an individual has that he has been deprived of status, possession or opportunity relative to other individuals or groups that are taken as his comparative frame of reference. However, this concept cannot be accepted without objections or reservations. As Merton points out:

. . . the major function of the concept of relative deprivation is that of a provisional after-the-fact interpretative concept which is intended to explain the variation in attitudes expressed by soldiers of differing social status.⁸²

Admittedly, the concept as used by Stouffer, et al., might easily be accused of being an ex post factum interpretation. Nevertheless, Merton feels that "propositions incorporating the concept of relative deprivation are readily subject to empirical nullification, if they are in fact untrue."⁸³

When the concept of relative deprivation is introduced into the study of intergroup relations, it is not intended to imply that the feeling of deprivation causes prejudice against the ethnic group. Rather it is assumed that relative deprivation may well intensify existing negative attitudes.

Such an assumption has logical and empirical support. Deprivation generates dissatisfactions and frustrations. Prejudice is generally considered to be a function of frustration.⁸⁴ Therefore, feelings of deprivation

⁸²Merton, op cit., p. 230.

⁸³Loc cit., footnote.

⁸⁴Williams, 1947, p. 53; also Bierstedt, op cit., pp. 477-478.

vation should be found to be significantly related to ethnic attitudes. It is postulated that the stronger one's feelings of deprivation relative to the situation of others with whom one compares oneself, the more strongly will frustrations be felt. "Hostility is a function of frustration . . ."⁸⁵ It would be expected that the deprived or frustrated person will search for a focal point on which to vent his frustration. Quite frequently this frustration will be displaced from the object which arouses it.

Displacement means the expressing of emotional reactions in a situation other than the one which aroused them. It is a shift of feelings or attitudes from a person or situation where they cannot be expressed to a person or situation where they can.⁸⁶

If a feeling of deprivation exists, it is easy to understand that one's neighbors and friends can hardly be criticized or disliked because they are relatively better off than oneself. Especially in a rural community, these persons constitute the social group of which one is a member. The social and personal costs involved in expressing or even consciously feeling hostility towards those of one's own group is much too high for most people. However, members of an ethnic group which is the object of community antagonism can without hindrance be criticized and overtly discriminated against. The displacement of frustration is even easier when community feelings are already rather strong against the ethnic group. It is more likely, also, when the ethnic group is defined as relatively more advantaged than oneself.

⁸⁵Williams, 1947, p. 53.

⁸⁶g. Stansfeld Sargent, Social Psychology, The Ronald Press Company, New York, 1950, p. 180.

This is not to imply the economic hypothesis of ethnic prejudice.

The economic hypothesis is defined by Bradbury here:

On (this) third hypothesis, discrimination is merely a more or less rational mode of adaptation to the social environment in the course of the pursuit of interests The individual simply discovers that he can serve his interests more effectively if he conforms to the existing social pattern of discrimination, or if he initiates discriminatory behavior, than if he defies the pattern or treats the members of another group as his equals. Discrimination occurs and persists insofar as it has utility in the attainment of the discriminator's goals, whatever they may be: maximizing his social status or his power, preserving the integrity of the organization with which he identifies himself, giving his children a good start in life, etc.⁸⁷

There may well be some instances of this in the case under study. Nevertheless, this is not one of the hypotheses to be tested in the present survey. Relative deprivation, although it may appear to have similarities to "prejudice for personal advantage," is better explained in the terms which have been used before rather than equating it with the economic hypothesis.

The null hypothesis describing such a relationship between attitude and relative deprivation would state:

ethnic attitudes are not significantly related to feelings of deprivation relative to the ethnic group.

The preceding discussion suggests that this null hypothesis will not be accepted.

⁸⁷W. C. Bradbury, "Evaluation of Research in Race Relations," Inventory of Research in Racial and Cultural Relations, vol. 5, 121, University of Chicago Press, Chicago, 1953.

Definition of the Ethnic Group

In the study of intergroup relations it is important to know how the relationship is viewed or perceived by the participants. "How a situation is perceived, then, determines most significantly the social behavior of the persons in it."⁸⁸ Social psychology has demonstrated that "one does not respond to a situation per se, but to the situation as he perceives, defines, experiences, and interprets it."⁸⁹ This psychological activity is termed "the definition of the situation." Its relevance for the study of intergroup relations is quite apparent. For example, if the ethnic group is considered to be depriving members of the larger society of their rightful opportunities, attitudes will be generated to support discriminatory action. If the ethnic group is defined as a menace, the dominant society will take steps to ensure that the anticipated aggression cannot occur. It is important to note here that there need be no objective basis in fact for such definitions. As W. I. Thomas has succinctly put it, "if men define situations as real, they are real in their consequences."

In a situation of intergroup tensions it is important to know what the community conceives to be the predominant characteristic, interest or activity of the ethnic group. The nature of this characterization would be expected to be significantly related to the attitudes which are held toward the ethnic group.

In the United States religious tolerance and religious freedom are

⁸⁸Sargent, op cit., p. 261.

⁸⁹Ibid., p. 279.

important values.⁹⁰ It is logical to expect that a culturally prescribed tolerance for religious "deviation" would mitigate against inclinations toward discriminatory activity or expressions of prejudice toward religious groups. This suggests, also, that an ethnic group defined as a religious group will be tolerated more than one not so defined.

Stronuous objections may be raised to the preceding statement.

For example, Bierstedt states that "the intensity of a belief often creates more havoc than the belief itself, and few beliefs are held more intensely than those related to religion."⁹¹ Nevertheless, for the time being, it is expected that prejudices against an ethnic group defined as religious will not be very explicitly expressed because of the internal conflict such mental activity would generate with the value of religious tolerance.

On the other hand, if an ethnic group is considered to be predominantly an economic group, no taboos against criticism, prejudice or discrimination exist. The reason for the greater freedom with which economic groups are criticized lies in the nature of economic activity. Robert K. Park suggests the primary characteristic of this type of activity very clearly in the following excerpt:

⁹⁰The respondents in this study were asked to indicate on a seven-point scale the intensity of their agreement or disagreement with the following statement: "Religious groups should be allowed to live according to their beliefs so long as they obey the law." Eighty-five out of ninety (94 per cent) indicated agreement with the statement. Of these 85, 76 indicated moderate or strong agreement; the other nine, only weak agreement. Compare this result with the discussion of basic American values in Robin M. Williams, Jr., American Society, Alfred A. Knopf, New York, 1950, pp. 417-422.

⁹¹Bierstedt, op cit., p. 462.

The conditions under which men buy and sell, have undoubtedly had a profound influence on human relations and upon human nature One meets at the market place . . . strangers, possibly enemies. They have all, each motivated by interests presumably personal to himself, come together because they need one another and because, by an exchange of goods and services, they hope not only to satisfy their own needs but also profit by the needs of others There is, also, the consideration that in the market one may have, among strangers, a better chance to drive a bargain since it is always difficult to bargain with friends and relatives. On the other hand, it is notoriously easy and interesting to trade with strangers

The familiar rule of the market place, caveat emptor, "Let the purchaser beware," is an indication of what was, and still is, the normal relation between buyer and seller.⁹²

From what Park states above, economic activity would appear to be highly rational and impersonal. If, then, an ethnic group is defined as primarily economic in nature, no stigma or proscription is placed upon criticism of the group. Prejudice and discrimination against economic groups do not disturb anyone's social conscience nor violate any cultural values.

Thus, the way in which an ethnic group is defined, what other people consider to be the predominant activity, interest or characteristic of the group, will influence greatly the attitudes they hold toward that group. Values of religious tolerance will restrain people from expressions of prejudice against ethnic groups defined as religious. The rationality of economic activity will permit members of the major society to express prejudices and to discriminate against ethnic groups defined as economic in nature. From what has been said it is hypothesized that

⁹²Robert Ezra Park, Race and Culture, The Free Press, Glencoe, Ill., 1950, pp. 89-90.

ethnic attitudes are not significantly related to the non-members' definition of the predominant activity or characteristic of the ethnic group.

From the preceding presentation it is expected that this null hypothesis will be rejected.

The applicability of such an hypothesis to the study of the Hutterites is apparent. In spite of contrary evidence in the literature (e.g., Bierstedt) it would be expected that the extent to which an ethnic group is defined as religious or economic in nature will be related to the intensity of the attitudes toward it. This can not be expected to hold true in societies in which religious tolerance is not a cultural value as in the United States. The important factor to be remembered is that attitude has a relationship to the definition of the ethnic group by other people. There is nothing in reference group theory which would demand that there be any objective basis in fact for the definition of the situation. It is the definition itself (valid or invalid) which influences behavior, not the objective situation.

A number of hypotheses and their theoretical warrant have been presented in the preceding pages. Now attention is turned to how these hypotheses were tested and what results were obtained. In the immediately succeeding pages the sample which was used for these tests is described. Before the findings are presented, there is a discussion of how each of the concepts included in the hypotheses were measured and how these hypotheses were translated into operational terms. First, however, the sample is described.

SAMPLE

Utilizing the concepts presented in the "Theoretical Framework," an interview schedule was constructed in the spring of 1958 with which to gather data to test the relationships posited between the variables mentioned. After a brief pre-test of the schedule, the farm operators who fell into the sample previously selected were interviewed. The manner in which the sample was drawn is described in the following paragraphs.

The sample from which the data in this thesis were obtained is the same one which was used for a similar survey made in the summer of 1956 under a project of the South Dakota Agricultural Experiment Station. The respondents used in the previous survey were re-interviewed for the present study. There were two reasons for using the sample for a second time: first, expediency - the sampling list was already available; second, necessity - this study was conducted as a part of the Experiment Station project under which the 1956 survey was made. It was desired to determine if any changes in attitude content, attitude intensity or population characteristics had occurred in the two years since the first survey. The sampling procedure described here is the one used in 1956 with a brief explanation about the 1958 sample.

In 1956, three South Dakota Hutterite colonies which were thought to represent different degrees of variation from the traditional Hutterite patterns of farm organization and operation, and different degrees of community anti-Hutterite sentiment were arbitrarily selected as interview areas. These colonies all lay along the James River in eastern South Dakota. They were: Tschetter colony in central Hutchinson county, New Elm

Springs colony on the Hutchinson-Hanson county line, and Spink colony in south-central Spink county. A fourth colony, Glendale, was included because it bounded Spink colony on the north.

For the 1956 survey, a five-mile radius was drawn around each of the four colonies using the colony headquarters site as the center. The occupied quarter sections within this radius were identified by using the 1956 South Dakota Farm Directory for the respective counties.

The sample areas were further stratified. Because of reports in newspapers and magazines and from preliminary observation in the areas, it was expected that the impact of the Hutterite colonies on the neighboring farmers would decrease as the distance of the neighbor from the colony increased. This suggested also that those living nearer to the colony would have significantly different attitudes toward the Hutterites than those living farther away. Therefore, a belt one mile in width was drawn around the boundaries of each of the four colonies. All of the farm operators living within this belt were in the sample. They were identified as the "adjacent-farm sample." The farmers living outside the one-mile belt and inside the five-mile radius were referred to as the "radial-farm sample."

As indicated above, geographic dispersion was thought to be the important factor to consider in sampling the areas chosen. Therefore, the respondents in the radial-farm area were sampled on the basis of the location of their farm residence as indicated in the 1956 Farm Directory. The listing units randomly sampled were the occupied quarter-sections within the radial-farm sample area. Although the farmer listed in the directory no longer lived on the place, the resident operator was interviewed since the selection was geographical, not personal. In quarter-sections on which

two places were located, both operators were interviewed. The radial sample constituted roughly 30 per cent of the occupied quarters in the radial-farm area.

When the interviews were conducted in 1956, refusals and unobtainable interviews constituted seven per cent of the listing units in the sample. In the adjacent-farm sample there were no substitutions because a 100 per cent sample of that area was intended. However, in the radial-farm sample alternates were substituted for refusals. The 159 completed interviews constituted nearly 50 per cent of the resident farm operators in the sample areas.

The survey conducted in 1958 was a partial replication of the 1956 work. Due to time limitations, respondents in the New Elm Springs area were not included in the second survey. The only respondents to be interviewed were ones for whom interviews had been completed previously. Of the respondents who had been interviewed in 1956, 115 were to be contacted again in 1958.

Not all of these 115 persons were interviewed a second time. In the two years since the first interviews were administered fourteen persons had moved out of the area. It was decided while in the field to exclude them from the sample because some had moved out-of-state and other were living at appreciable distances from their previous residence. One respondent had died. Another interviewee was absent each time the interviewer called. A third respondent was so deaf that communication was virtually impossible. Eight other respondents (seven per cent) refused to answer any questions. As a result, only 90 respondents (78 per cent of the sample) were interviewed in the summer of 1958.

Summarizing, the sample for the present study was comprised of 115 farm operators who lived within a five-mile radius of three Hutterite colonies in eastern South Dakota who had been similarly interviewed in 1956. The conclusions reached in this report are based upon the data gathered from the 90 respondents who cooperated with the interviewer in the summer of 1958.

MEASUREMENT

Attitude

Existing theory provides the source for the conceptual framework within which to consider ethnic attitudes. The measurement of these theoretical concepts creates difficulties of another kind. The operational definition of the previously-mentioned concepts is facilitated by work which has been done by other investigators. The primary sources utilized in the operational definition of these terms have been reported in the materials summarized previously. In this section the techniques by which each of the conceptual variables was measured are described. The use of the terms "nominal hypothesis," "operational definition," "nominal definition" and "working hypothesis" was adopted from Zetterberg's excellent discussion of research design.⁹³ According to him, working hypotheses are constructed by replacing the concepts or terms in the nominal hypotheses by the operational definitions derived from the research design. Nominal hypotheses have been given in the "Theoretical Framework;" operational definitions are developed in the following pages.

In accordance with the theoretical framework presented earlier in this thesis, three measures of attitude were made in the survey. They were: (1) a stereotype index, (2) a conceptions scale (both are parts of the cognitive component), and (3) a social distance scale to identify the conative component. The affective component was not utilized in the pres-

⁹³Hans L. Zetterberg, On Theory and Verification in Sociology, The Free Press, New York, 1954.

ent study because the measurement of it presented a challenge greater than could be met with the limited experience and training of this student.

Stereotypes

Recalling what was said earlier, the cognitive component of an ethnic attitude has two aspects - the stereotype and the more generalized conceptions of the ethnic group. These two aspects were measured separately in this study. Stereotypes were measured by the use of a trait list, a procedure used frequently in studies of ethnic attitudes.⁹⁴ The trait list for the Hutterites⁹⁵ was made up largely with the collaboration of my thesis advisor and helpful suggestions from the literature reviewed in the early stages of the research program. There was some difficulty in scoring the trait list because such a procedure was not described in the literature reviewed. Only content analyses of the traits were made without any attempt to score valence (favorableness-opposition) or salience (intensity.)⁹⁶ The only reference to valence was discovered in a recent summary by Katz and Braly of the classic study they made in 1932.⁹⁷ Al-

⁹⁴Irvin L. Child and Leonard W. Doob, "Factors Determining National Stereotypes," Journal of Social Psychology, vol. 17, 203-219, The Journal Press, Provincetown, Mass., 1943. G. M. Gilbert, "Stereotype Persistence and Change among College Students," Journal of Abnormal and Social Psychology, vol. 46, 245-254, American Psychological Association, Inc., Albany, N.Y., 1951. Also, Max Meenes, "A Comparison of Racial Stereotypes of 1935 and 1942," Journal of Social Psychology, vol. 17, 327-336, The Journal Press, Provincetown, Mass., 1943.

⁹⁵See Appendix I-A.

⁹⁶R. A. Schermerhorn, These Our People, D. C. Heath and Co., Boston, 1949, pp. 488-490.

⁹⁷Daniel Katz and Kenneth W. Braly, "Verbal Stereotypes and Racial

though scoring was mentioned in this summary, their description did not indicate clearly how it was utilized or done. This lack of a precedent necessitated working out a procedure for scoring the trait list used in this study in order to make the needed analysis and correlation with other data.

When the trait list was administered to the respondents in the field, they were instructed: "This is a list of characteristics of people. They are general characteristics; some are bad, some are good. For each one would you please tell me whether you feel that the word describes the Hutterites." No indication was given by the respondents whether the terms they checked were defined by them as negative and critical, or as positive and complimentary. In order to score the responses it was necessary to determine the valence of the traits - i.e., which terms had a negative connotation and which, a positive. Sixty-eight students in three elementary sociology classes assisted in the procedure of assigning valence to each term. They were asked to indicate with a plus or a minus for each term whether they thought it would be a favorable or unfavorable description of a minority group. They were not told that this list had been used to elicit responses about the Hutterites of South Dakota. It was recognized that some terms might be either positive or negative in different instances of group stereotyping. For such a term the judges were instructed to indicate whether it would be a favorable or unfavorable characterization

Prejudice," in Readings in Social Psychology, third ed., Eleanor E. Maccoby, Theodore M. Newcomb and Eugene L. Hartley, eds., Henry Holt and Co., New York, 1958, pp. 40-46. This article is adapted by the authors from their two earlier articles.

in most cases. Negative and positive scores (valences) were then assigned to each of the terms.

The frequencies with which each word or phrase was identified as a favorable description were recorded. The possible frequencies ranged from zero to 68 - that is, any term could have none of the judges consider it favorable; all of them; or any number between these extremes. It was expected that for most terms a consensus would exist on the basis of which a positive or negative valence could easily be assigned. There was also the possibility that for some of the words and phrases in the list the judges would disagree on the valence. It was decided that any term whose frequency of positive response lay in the center twenty-five per cent of the theoretical frequency array (items whose frequency of positive response was from 26 through 42) would be identified as "ambivalent" and excluded from the scoring. Terms receiving a positive score by more than 42 of the judges were identified as "positive," and those receiving less than 26 positive scores were termed "negative." Using this procedure, four terms were identified as ambivalent and were not included in the calculation of the stereotype index.

The scoring by the judges agreed with the scores which the interviewer gave the terms after the field work was completed except for three cases. "Powerful competitors," "shrewd" and "expansive" were thought to have negative valence as the interviewees responded to them. The judges, however, agreed that they had favorable connotations. To test the interviewer's score on these three items, the stereotype index was calculated first excluding the three terms from the equation (C_1). This index was calculated twice more - once with the three questionable items included

among the negative terms (C_2); once with the same three items included among the positive terms (C_3). Rank correlations between C_1 and C_2 and between C_1 and C_3 were calculated. In the first case the rank correlation coefficient was .99; in the second, .97. The stereotype index used in the final tabulations did not include the three questionable terms since they did not contribute significantly to the ranking of the respondents.

Fifty-six of the 63 terms included in the trait list were used to calculate the stereotype index for each respondent. This index is calculated by use of the following formula, developed especially for the present study:

$$C = \frac{F - U}{F + U} ,$$

where F = number of favorable traits checked; U = number of unfavorable traits checked. This formula gives the direction of the respondents' attitudes and indicates intensity by stating the difference between the favorable and unfavorable traits in terms of a proportion of the total number checked. There was nothing in the literature to suggest that the number of traits checked is related to intensity of attitude. In other words, there does not seem to be any reason to assume that the person who checks forty traits has a stronger attitude than the person who checks only ten. With this theoretical allowance, it was expedient to consider only the traits checked when calculating the index rather than some ratio of possible responses to actual.

For the analyses which were made of these data the stereotype index was categorized as "favorable," "neutral," or "opposed." The respondents whose index was .400 or above were typed as "favorable;" those whose index

was $-.300$ or lower were typed as "opposed." The others were termed "neutral." These three classes were first correlated with the classes into which the other variables were grouped.

Conceptions and Social Distance

The two other attitudinal measurements used in this study - conceptions and social distance - were made easier to construct by the work of previous investigators, especially Kramer.⁹⁸ In his paper Kramer attempted to present a specific framework of differentiated dimensions of attitude which he felt would serve as a basis for further research. As an additional aid he included an appendix with a large number of questions and statements which had been used in earlier studies to measure attitudes. He classified and grouped these items according to the dimensions described in the text of his paper. From an examination of those items and from other studies of prejudice, statements which were intended to measure attitudes toward the Hutterites were incorporated into the interview schedule. Some of the statements were used in the 1956 survey; others were taken from Kramer and other sources and paraphrased to fit the Hutterite situation.

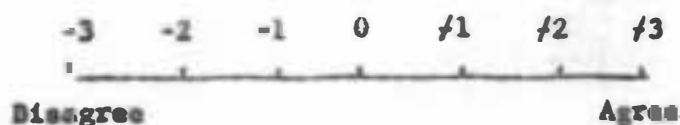
The validity of the measures of the attitudinal components used in the present survey lies primarily upon Kramer; his discussion of the dimensions of attitude and his appended list of statements and questions served as the basis for the construction of the instrument used for this study. Kramer's authority is substantiated by succeeding surveys and studies such

⁹⁸Kramer, op cit.

as those reported in Harding,⁹⁹ Rose¹⁰⁰ and Williams' two monographs.¹⁰¹

Two sets of declarative statements were used in these two measures of attitudes toward the Hutterites. Sixteen statements to measure the more generalized conceptions the respondents had about the Hutterites were included in the interview schedule.¹⁰² The conative component of attitude was measured here by using ten statements which elicited responses indicating the social distance at which the respondents held the Hutterites.¹⁰³

These sixteen conceptual and ten social distance statements were randomly combined in a single series of statements with four other statements which ostensibly measured another of the independent variables - definition of the ethnic group. When the schedule was administered, the respondents were informed: "The statements which follow are remarks which have been made about the Hutterites. With the same scale we used for the list of general questions before, would you tell me how strongly you agree or disagree with each statement below." The seven-point scale on which they indicated the extent of their agreement or disagreement is reproduced here:



⁹⁹Harding, *op cit.*

¹⁰⁰Arnold M. Rose, *The Roots of Prejudice*, United Nations Educational, Scientific and Cultural Organization, Paris, 1951.

¹⁰¹Williams, 1947. Also, Williams, 1957.

¹⁰²See Appendix I-B.

¹⁰³See Appendix I-C.

The method by which the attitude questions were scored and combined is explained in the following section. After this brief review of the scaling theory and technique developed by Louis Guttman and his associates, a description of how the data collected in this study were handled is included.

Guttman Scaling Theory

There are three techniques which are frequently used to summarize a set of attitude questions for statistical analysis - the Thurstone scale, the Likert scale and the Guttman scale. Although the first two techniques are simpler than the third, some writers have pointed out that they have a logical limitation which the third does not.¹⁰⁴ In spite of the fact that questions may be constructed to measure a specific attitude or attitudinal component, it is conceivable that the questions an investigator uses might be completely unrelated to each other. To prevent making such an error, Guttman developed a technique which he claims enables an investigator to determine reliably and empirically whether a set of questions all measure the same dimension of attitude.¹⁰⁵ The term used in reference

¹⁰⁴See Marie Jahoda, Morton Deutsch and Stuart W. Cook, Research Methods in Social Relations, The Dryden Press, New York, 1951, pp. 185-202, *passim*. However, Guttman scaling has itself come under criticism. See, Leon Festinger, "The Treatment of Qualitative Data by Scale Analysis," Psychological Bulletin, vol. 44, 149-161, American Psychological Association, Washington, D.C., 1947. Also, Roy C. Francis and Robert C. Stone, "Measurement and Scale Analysis," Midwest Sociologist, vol. 18, 16-27, Midwest Sociological Society, St. Louis, 1956. More recently, James A. Davis, "On Criteria for Scale Relationships," American Journal of Sociology, vol. 63, 371-380, University of Chicago Press, Chicago, 1958.

¹⁰⁵Unless otherwise noted the primary source for this discussion of

to this characteristic of a series of questions is "unidimensionality."

Jahoda, Deutsch and Cook have capably summarized the important characteristics of the Guttman scale in the following manner:

The Guttman technique, commonly called scale analysis or the scalogram method, has as one of its main purposes the determination of whether the attitude or characteristic being studied (technically termed the "universe of content" or the "universe of attributes") is actually scalable. . . . It may well be that . . . all items that a consensus of capable judges would consider indicative of this attitude may not be unitary (unidimensional). Thus, an "attitude . . ." might really be a host of discrete unrelated attitudes If the basic assumption is incorrect and the universe of content being studied is not unitary, then it makes little sense to attempt to order people in terms of it, since the "it" is really a "they."

If a universe of content gives rise to a perfect scale with a given population of individuals, it provides an unambiguous ranking of individuals on an ordinal scale. Moreover, such a scale has a number of important characteristics. Perhaps the major one is that, unlike the Thurstone and Likert scales, a given score on a particular questionnaire always has a given meaning; knowing an individual's score makes it possible to tell, without consulting his questionnaire, exactly which items he endorsed.¹⁰⁶

Regarding unidimensionality, the originator of the technique asserts that "scale analysis provides an objective test of whether or not any particular poll question contains but a single dimension of meaning that is common to all similar questions"¹⁰⁷ It is important to recognize that although scaling is a measure of unidimensionality, as an empirical

Guttman scaling is: Samuel A. Stouffer, et al., Measurement and Prediction (Studies in Social Psychology in World War II, vol. 4) Princeton University Press, Princeton, 1950. Additional sources are cited at the end of this section.

¹⁰⁶ Jahoda, Deutsch and Cook, op cit., pp. 198-199.

¹⁰⁷ Stouffer, vol. 4, p. 88.

tool the Guttman technique of scale analysis cannot identify the content being measured. This is determined only by the logical intention of the investigator.

The basic problem in constructing a Guttman scale is to select items so that all persons who answer a given question positively will have higher ranks than those who answer it negatively. This is the primary assumption on which Guttman scaling theory is based.

The scalogram hypothesis is that the items have an order such that, ideally, persons who answer a given question favorably all have higher ranks on the scale than persons who answer the same question unfavorably.¹⁰⁸

The scale arrangement of the items is made only after the data are gathered, so as a result the ranking always has an empirical basis.

The scale order of the attitude questions used in a study is determined by the frequency of "scored responses" for each question. A "scored response" is the response which is considered by the investigator to be most favorable to the group which is the subject of the attitude research. Each of the questions which the investigator uses will usually have different frequencies of scored responses. When a question has a high frequency of positive responses, it is considered "easy" because so many individuals reacted positively to the statement. Conversely, when few persons give scored responses to an item, it is considered "hard." Obviously, the place at which the answers to the question are dichotomized will have an influence upon this rank order. According to the assumption of Guttman theory stated above, an individual who answers a question positively will

¹⁰⁸ Ibid., p. 9.

in all likelihood answer all easier questions in the same manner. By knowing what was the hardest question an individual answered positively, it would be possible, theoretically, to perfectly reproduce his responses to the other questions in the scale.

Actual responses do not always conform to this expectation, however. Sometimes a person will answer one question positively but respond negatively to one or more of the easier items. When a person's response pattern is interrupted by a failure to conform to this expectation, he is said to have made a "scale error." Since Guttman's theory states that an individual's response pattern should be reproducible from the scale score given him, too many scale errors will make it impossible to reproduce an interviewee's answers to the scale items with a significant degree of reliability. Guttman's technique enables one to reduce the amount of scale error by reducing the number of items in the scale. When a statement causes a large number of scale errors to come up in the response patterns of the interviewees, it is called a "non-scalable item" and can be eliminated from the scale. Because the Guttman technique is primarily a test for unidimensionality, items which are non-scalable obviously cannot be from the same universe of content as are the other items in the scale. By eliminating the empirically identified non-scalable items, the investigator can be certain that the questions he retains are unidimensional.

As these manipulations continue a final scale order emerges in which the items are arranged in order from hardest to easiest. According to the hardest question which he answers positively, a scale score can be assigned to each person interviewed. The respondents are then ranked in order of decreasing scale scores. The ones with the largest scale scores are most

favorable in their attitudes toward the subject being studied; the ones with the smallest scale scores are least favorable.

In constructing a scale, it is not enough that attitude questions be arranged in a particular order as described above. Guttman also set up a number of other criteria which must be met before they can be said to constitute a true scale - i.e., before they can be declared unidimensional. These criteria are seven in number.

1. 90 per cent reproducibility of the scale. This requirement, measured by the "coefficient of reproducibility," means that scale errors cannot exceed 10 per cent of the total number of responses. The formula for the calculation of this value is:

$$C.R. = 1 - \frac{\text{total number of scale errors}}{(\text{number of respondents}) \times (\text{number of questions})}$$

This value is essentially a probability statement. The investigator is able to say that any reproduction of responses which he might make from a given scale will be accurate in at least 90 per cent of the cases.

2. 90 per cent reproducibility of each item. Guttman felt that not only must the scale have less than 10 per cent error but also each question should be 90 per cent reproducible. This coefficient is calculated by this formula:

$$C.R._i = 1 - \frac{\text{numbers of errors}}{\text{number of respondents}}$$

3. range of marginal frequencies. The percentage of scored responses for each question included in a scale must lie within the range of 15 to 85 per cent.
4. random distribution of errors. Although he specified this criterion, Guttman did not specify what constitutes non-random

error. Ford¹⁰⁹ suggests that there should be no cases in which errors occur in sequences greater than five per cent of the total number of respondents.

5. number of items. Guttman initially stated that there should be at least ten items in the completed scale. This criterion appears to be quite flexible, however. Ford¹¹⁰ describes a technique for scaling less than six items using IBM equipment. Appendix III of this thesis describes a technique for scaling three items.
6. number of respondents. Guttman felt that 100 respondents is the minimum which could be used if reliable results are to be obtained.
7. less error than non-error. In addition to the second criterion regarding the reproducibility of individual items, in no case must a scale item have more error responses than non-error responses in the final scale order.

The logic behind these criteria is to be found discussed in some detail in most of the references cited in the methodology section of the appended bibliography. Guttman has most extensively described his technique and theory in Stouffer.¹¹¹ Riley, et al.,¹¹² have also discussed the applications of the technique in some detail. For further explanation the reader is referred to these sources. The succeeding discussion describes

¹⁰⁹Robert N. Ford, "A Rapid Scoring Procedure for Scaling Attitude Questions," in Sociological Studies in Scale Analysis, Matilda White Riley, et al., Rutgers University Press, New Brunswick, N.J., 1954, p. 294.

¹¹⁰Ibid., pp. 273-305.

¹¹¹Stouffer, vol. 4. Although Stouffer contains the most extensive discussion of this technique, Guttman first reported his technique and its rationale in two journal articles: Louis Guttman, "A Basis for Scaling Qualitative Data," American Sociological Review, vol. 9, 139-150, American Sociological Society, Albany, N.Y., 1944; also, Louis Guttman, "The Cornell Technique for Scale and Intensity Analysis," Educational and Psychological Measurement, vol. 7, 247-280, Washington, D.C., 1947.

¹¹²Matilda White Riley, et al., Sociological Studies in Scale Analysis, Rutgers University Press, New Brunswick, N.J., 1954.

how the criteria of scalability and unidimensionality which have been reviewed here were applied to the data from the present survey.

Scalability of Survey Data

A limitation of scaling the present interview data according to Guttman's technique is that only 90 interviews were taken. However, because Guttman scaling is the best way, in the estimation of this writer, to handle such data, and because of the fulfillment of the other criteria, it was considered permissible to incorporate these items into Guttman-type scales.

Because the conceptions statements were scaled separately from the social distance items, the data on the two sets of questions will be reported separately.

When the marginal frequencies for the conceptions items were calculated, three of them lay outside the range of marginal frequencies so they were excluded from any further manipulation.¹¹³ Two other items were left out because their marginals were so close to the frequencies of other items that they could not discriminate clearly between respondents. After these five items were eliminated, the remaining eleven were ranked in order from most difficult to easiest.

In the manipulation which followed, five of these items were eliminated because they introduced too much error into the scale. The final conceptions scale included the following six items in order of decreasing difficulty: #1, #2, #9, #11, #17, and #14. A detailed record of how

¹¹³See Appendix I-B.

well the data complied with the criteria is included in Appendix II-A. The scale scores for these questions comprise the operational definition of the conceptions aspect of the cognitive component of ethnic attitudes. The scale scores were combined into three categories and the number of respondents in each of these is recorded in Table I below.

The social distance questions were handled in the same manner.¹¹⁴ Two questions lay outside the acceptable range of marginal frequencies. A third was eliminated because it was non-discriminatory. The seven remaining statements, listed here in order of decreasing difficulty, scaled without complications: #6, #12, #28, #21, #13, #4, and #15. The reader is again referred to Appendix II-B for the details of how the data conform to Guttman's criteria. Social distance is operationally defined as the scale scores on these seven questions. This scale was also divided into three categories. The number of respondents in each is included in Table I below.

TABLE I. NUMBER OF RESPONDENTS IN EACH CATEGORY
OF THE THREE MEASURES OF ATTITUDE.

Attitude Category	Conceptions Scale	Social Dis- tance Scale	Stereotype Index
Favorable	26	14	40
Neutral	47	44	36
Opposed	17	32	14

¹¹⁴See Appendix I-C.

The stereotype index, which was discussed earlier, was also classified into the same three categories. The frequencies of that breakdown are included in Table I on the previous page.

Having made three measures of attitude for the present study, some way of combining them so that the working hypotheses of this study can be tested must be utilized. The steps which were taken in this process are described in the following section.

Composite Measure of Attitude

For the present study three measures of attitudes have been made using a stereotype index, a social distance scale, and a conceptions scale. Although some of the presentation by Harding, et al., seems contradictory, they summarize their review of research findings by indicating that a close correlation exists between different measures of attitude.

. . . the relationship among the various attitudinal components is so close that it does not make much difference in practice whether we use cognitive, affective, or conative tendencies to rank individuals with respect to their attitudes toward any specific ethnic group.¹¹⁵

The attitudinal measures used in this survey were correlated to determine if only one of the scores could be used as the dependent variable for testing the hypotheses incorporated into the study. From the statement above, it was expected that the correlation coefficients would be high (.75 or greater) and roughly equal (within .05 of each other.) A low and unequal correlation between the three measures of attitude would make it impossible

¹¹⁵Harding, op cit., p. 1030.

to use one of them as representative of all three. For example, the correlation between social distance and an independent variable would be quite different from the correlation between the stereotype index and the same independent variable if social distance and the stereotype index were not themselves correlated closely.

When the coefficients of correlation between the three measures of attitude were calculated, they were found to be too low and too unequal to permit the use of just one measure of attitude as had been hoped. An examination of the coefficients shows the discrepancies between the three measures clearly:

social distance and conceptions	$r = .638$
social distance and stereotype index	$r = .388$
conceptions and stereotype index	$r = .347$

Although these simple r 's appear to cast doubt upon the theoretical framework of this thesis, they are not inconsistent with earlier findings.

Harding, referring to work by Barbara K. MacKensie, reports:

. . . the degree of correlation between two attitudinal measures seems to depend more on similarity in the measurement techniques used than it does on the attitudinal content these techniques are intended to tap.¹¹⁶

Both social distance and conceptions were measured by scaling a series of statements - i.e., by using similar measurement techniques. The correlation between these two factors is the highest of the three. This finding is consistent with earlier work but does not appear to be consistent with the expectation derived from the theoretical framework of this study.

Confronted by data which seem to contradict theoretical expectations,

¹¹⁶Ibid., p. 1029.

it is necessary to explain the anomalous findings either by developing new theory or by finding allowances within the existing framework. This student feels that at this point it is presumptuous to question theory which has been accepted in the field of intergroup relations and apparently substantiated by earlier studies. Nevertheless, the validity of the measures which were used can hardly be questioned for two reasons: primarily, because they were derived from existing work, mainly Kramer's;¹¹⁷ and secondarily, because by scaling attitude questions, the derived measures can be defined as unidimensional, thereby implying an internal validity for the two scales developed from the data.

The alternative explanations for these findings - either the theory is inaccurate, or else the measures are invalid - are equally unacceptable. Instead of impaling this study on either of the horns of this logical dilemma, however, there is an escape between them. Rejecting the second proposition of the dilemma as false, there is no reason to accept the first. There is a third proposition which, if substantiated, makes it possible to reject both alternative explanations. In spite of the care which was taken in the development of the test instruments, it is possible that only one dimension of attitude has been measured.

Returning to the theory, there appears to be a basis on which to determine whether more than one component of attitude has been tapped in this study. Harding states that "the discrepancies in attitude occur often enough to make us quite sure that prejudice toward a particular group

¹¹⁷Kramer, op cit.

is not actually a unitary variable"118 Williams' remark to the same effect has been quoted before and need not be repeated here.¹¹⁹

If by "unitary" is meant "unidimensional," the unidimensionality of the three measures of attitude can be determined using Guttman scaling theory. It would be an error to assume a priori that the same term means the same thing to different people - i.e., "dimension" means the same thing to Kramer and to Guttman. From his writings, however, Guttman would seem to agree with Kramer in this case. The implication that in Guttman's understanding "unidimensionality" refers to what the social psychologists have called "a single component" is quite apparent in the following statement:

Murphy, Murphy and Newcomb further note that, "as a matter of fact there is every reason to believe that none of the rather complex social attitudes which we are primarily discussing will ever conform to such rigorous measurement."¹²⁰ Perhaps such a belief may account for the fact that the mass of current attitude research pays little or no attention to this fundamental rationale. The common tendency has been to plunge into analysis of data without having a clear idea as to when a single dimension exists and when it does not.¹²¹

This statement by Guttman as a basis for his scaling theory appears to justify the acceptance of "unitary" and "unidimensional" as synonymous in the present discussion.

¹¹⁸Harding, op cit., p. 1030.

¹¹⁹Williams, 1947, p. 38. See pp. 4-5, 19 of this thesis.

¹²⁰Gardner Murphy, L. B. Murphy and T. M. Newcomb, Experimental Social Psychology, rev. ed., Harper & Bros., 1937, p. 897.

¹²¹Stouffer, vol. 4, p. 63.

Whether these three measures of attitude are in fact unidimensional can be tested by attempting to scale them together. If they can be empirically identified as unitary by scaling them, the proposition that only one component of attitude has been measured can be accepted. Using the modified Guttman technique described in Appendix III, the three scores of attitude - stereotype index, conceptions scale and social distance scale - were successfully combined into a single scale score. The practical advantage of this scale score is that it provides a meaningful index of attitude as measured in the present study. It would appear from this test that two components of attitude were not measured as was intended; nevertheless, a single measure of attitude is available from the interview schedule.

Operational Definition of Attitude

Having described the manner in which attitudes have been measured in the present study, the discussion can be summarized by transforming the nominal definition of the theoretical framework into operational terms. This thesis is a study of ethnic attitudes toward the Hutterites of South Dakota. Nominally, an ethnic attitude was defined as a predisposition to perform, perceive, think and feel in relation to a specific ethnic group. Operationally, ethnic attitude is here defined as one's score on the composite scale of the three measures of attitude toward the Hutterites used in the interview schedule. It is this definition of attitude which will be used in the working hypotheses tested in this thesis. Attention will now be turned to a consideration of the measurement of the independent variables of this study.

Contact

Frequency

The first independent variable to be correlated with attitude is contact. Contact has been defined previously as an interaction situation. To operationally define this concept, fifteen instances of contact with the Hutterites were identified on the interview schedule. The frequency with which the respondents experience each of the interaction situations was elicited by the question: "Would you tell me how often you have had the contacts mentioned in this list?" Most respondents reported having contact with the Hutterites in very few of the instances mentioned. The frequency of contact in the situation in which the interviewee most often engaged was used as the measure of frequency of contact. Responses were classified as "never," "occasionally or rarely (once a month or less)," or "regularly or frequently (more than once a month)." This trichotomous frequency classification is the operational definition for "frequency of contact." Introducing this definition with the definition of attitude into the hypothesis for testing, the working hypothesis in null form now reads:

the scores on the composite attitude scale are not significantly related to the frequency - never, occasionally or regularly - of contact the respondents have with the Hutterites.

Intimacy

Contact was considered not only in terms of frequency but also in terms of "intimacy." Intimacy of contact is here operationally defined as type of contact. By the latter term is meant "the predominant characteristic of the interaction situation." Predominant characteristic is

best defined by example. "Business" or "economic activity" would be the predominant characteristic of the interaction between persons making a purchase or a loan arrangement; "recreation" or "social activity" would be the predominant characteristic of the interaction between persons attending a dance together or visiting. It should be apparent that intimacy is implied in the phrase "type of contact," but the latter term is more explicit and more easily utilized than the former.

The fifteen interaction situations identified in the interview schedule were grouped according to their predominant characteristics into three types of contact - business, social and religious. The interaction situations categorized under each type are listed below:

Business

Colony does blacksmithing and welding for respondent.
 Colony makes machinery, car and truck repairs for him.
 Respondent buys garden produce from colony.
 Respondent buys livestock and grain from colony.
 Colony does custom work (baling, etc.) for the respondent.
 Colony does carpentering for respondent.
 Respondent loans colony machinery and tools.
 Respondent has had to settle trouble about colony cattle.

Social

Respondent has eaten meals at colony (other than wedding reception.)
 Respondent goes to visit Hutterite families at colony.
 Respondent takes his guests to see colony.
 Respondent attends weddings at colony.

Religious

Respondent has attended church services at colony (other than wedding.)
 Respondent has attended funerals at colony.

These three types of contact are listed in order of their increasing intimacy. The assumption of increasing intimacy is supported by the differing

frequencies with which each type of contact is reported. Following the logic of Guttman scaling theory, the type of contact with the lowest frequency of experience (religion) would be most intimate; that with the highest incidence (business) would be least intimate. The greatest number indicated that they had business contact while few indicated any religious contact. This result validates somewhat the operational definition adopted in this case.

The three classes of interaction situations as recorded above - business, social and religious - comprise the specific types of contact identified in this study. When this definition is introduced in the place of the nominal concept, the working hypothesis which is tested in the null form states:

the scores on the composite attitude scale are not significantly related to the type - business, social or religious - of contact the respondents have with the Hutterites.

Knowledge

The second independent variable to be considered is knowledge. As was indicated in the theoretical discussion, inaccurate information may be more closely related to attitude than amount of accurate information. Both aspects of knowledge were measured by the same set of items, handled differently for the two cases. Ten declarative statements describing a number of facets of Hutterite life were read to the respondents.¹²² They were asked to express agreement or disagreement with the statements using the

¹²²See Appendix I-E.

same seven-point scale with which they had answered the attitude statements.

Accurate Knowledge

The amount of accurate information was scored by counting the number of responses each interviewee made which agreed with the knowledge which had been gained during four years of participation in the Experiment Station project concerned with the Hutterites of South Dakota. This index is simply the number of correct responses the interviewee made. The scored responses are indicated in the appendix with the list of statements.

The indices were grouped into three classes of amount of accurate knowledge: "low (less than four correct);" "medium (from four to seven correct)" and "high (eight or more correct)." This trichotomous index of accurate information comprises the operational definition of the amount of accurate knowledge used in the working hypothesis. The relationship between the two variables is tested in the following null form:

the scores on the composite attitude scale are not significantly related to a low, medium or high amount of accurate knowledge the respondents have about the Hutterites.

Inaccurate Knowledge

In contrast to a classroom examination on which answers are either right or wrong, these ten knowledge questions have three significantly different kinds of answers - right, wrong and "I don't know." The importance of the differences among these answers becomes apparent when it is desirable to specify the inaccuracy of a respondent's information. By scoring each respondent according to the previously outlined procedure,

expressions of ignorance were treated the same as wrong answers, obscuring the important relationship between inaccurate information and the respondents' attitudes posited in the theoretical framework. If the same ten statements are scored on the basis of the number of wrong answers given, a measure of the inaccuracy of the respondents' knowledge is available. The second knowledge index is the number of questions the respondent answered incorrectly. This index of inaccurate knowledge was trichotomized, also, into "low (two or three incorrect responses)," "medium (one incorrect response)" and "high (no incorrect responses)." Inaccurate information is operationally defined by the above-described classes of the index. Incorporating this definition into the working hypothesis, the null form of the proposition states:

the scores on the composite attitude scale are not significantly related to inaccurate knowledge - low, medium or high - the respondents have about the Hutterites.

Opinion Leaders

The influence of other persons on one's own attitudes is discussed at some length in an earlier part of this thesis. The hypothesis which was derived from that discussion states, in the null form, that

ethnic attitudes are not significantly related to the attitudes of community opinion leaders toward the ethnic group.

The theoretical development of this hypothesis suggests that the null form will be rejected in the present study.

Opinion leaders were identified in the interview schedules by the following question: "What person(s) around here seem to know the Hutterites pretty well?" It was intended that this question would elicit re-

sponses indicating the opinion leaders to whom the interviewees defer in the formation and support of their own attitudes toward the Hutterites. The phrasing in the above statement was more indirect and affectively neutral than the following question would have been: "What person(s) around here would you say have influenced you most in the development of your attitudes toward the Hutterites?" Such phrasing seemed likely to arouse responses antagonistic to the question. Because the second question was felt to be implied in the first, it was assumed that the respondents would mention persons whose attitudes were similar to their own.

It is expected that the first question above which the respondents were asked will give data with which the hypothesis may be tested. Translated into operational terms the working hypothesis in null form reads:

the scores on the composite attitude scale are not significantly related to the scores on the same scale given to persons identified as "knowing the Hutterites pretty well."

Relative Deprivation

The concept of relative deprivation suggested itself for the present study because in the four years in which the project has been active, comments have been recorded to the effect: "When we came home on leave, there was the colony putting up hay for our folks that we would have been doing if we hadn't been in service." "While we had to go spend two-three years in service, the Hutterite boys stayed home and had it easy." "We saw a lot of tough things and got in some pretty tight places so the Hutterites could be safe at home making money and buying up all the land." "If the Hutterites hadn't bought up all the land in the country, young farmers would have a chance to get their own place." "With the Hutterites

around & fella can't rent any land; the landlords like to lease to the colony." Remarks such as these express a feeling of deprivation on the part of the speakers as they compare themselves and their fellows with the Hutterites.

The two factors used to measure relative deprivation in the present study are veteran status and tenancy, to which there is reference in the representative comments above. On the part of many veterans there seems to be a feeling that the Hutterites are at an economic advantage due to the fact that Hutterite boys had stayed home and colony farming went on uninterrupted while neighbors' sons had gone into service and land lay idle. Additional dissatisfactions were generated because the land these young men would otherwise have farmed lay idle or was rented or purchased by the colony. Tenant farmers seem to feel that the large-scale operation of the colony recommends itself to land-owners and puts at a disadvantage the "little-guy" who wants to rent or buy land cheaply.

The generalized statement of the hypothesis, given here in its null form, will be tested in its specific applications to veteran status and tenancy:

ethnic attitudes are not significantly related to feelings of deprivation relative to the ethnic group.

Veteran Status

Some of the quotations above indicate the relevance which veteran status might have in a study of attitudes toward the Hutterites. The service record of each respondent was included in the interview schedules with other background information. From the theoretical discussion in an earlier

section, high correlations will be expected between attitudes and veteran status. The working hypothesis, however, is stated in the null form:

the scores on the composite attitude scale are not significantly related to the respondents' status as a veteran or non-veteran.

A further qualifying factor can be introduced into the present discussion. It was anticipated that veterans who were members of veterans organizations (VFW and American Legion) would hold more strongly negative attitudes toward the Hutterites than would non-member veterans. The concept of relative deprivation clarifies why this relationship should be expected.

Since deprivation is a relative concept, different comparative reference groups will elicit differing expressions of feelings of dissatisfaction. A veteran would be expected to feel more antagonistic toward the Hutterites than his non-veteran neighbors. At the same time, reference group theory would suggest that the member of a veterans organization would feel more strongly against them than would the non-member veterans. The reasons for such an expectation are related to reinforcement psychology. Meetings of veterans organizations tend to call back into the memory of its members the experiences and feelings of their years in service. Part of this configuration of "military memories" is the feeling of deprivation relative to the Hutterites which the serviceman had. On this basis it can be hypothesized in operational terms that:

the scores on the composite attitude scale are not significantly related to the respondents' membership or non-membership in veterans organizations.

Tenancy or Ownership Status

Also suggested by informal observation, the concept of relative deprivation would cause one to expect that the tenant will be less satisfied with his situation than will the owner. The ownership of one's own place seems to be a common goal for midwestern farmers. The tenant will be hoping someday to attain this goal and working and planning to that end. The concept of relative deprivation suggests that if a farmer is having difficulty in attaining his goal while the Hutterites seem to be realizing the success for which he hopes, he is likely to be more dissatisfied than if he had no successful neighbors with whom to compare himself. The data collected in the 1958 survey make it possible to test the following working hypothesis:

the scores on the composite attitude scale are not significantly related to the respondents' ownership status as tenant, part owner or owner of the entire operated acreage.

The null form of this hypothesis is expected to be rejected on the basis of the theoretical discussion.

Definition of the Hutterites

In the attempt to measure the final variable considered in the present thesis, five questions which were intended to determine whether the respondents defined the Hutterites as a religious group or an economic group were included on the interview schedule. Four were stated in the same format with the conceptions and social distance items.¹²³ These four items were to have been scaled according to the Guttman technique; but

¹²³See Appendix I-D.

when this was tried, they did not meet the criteria for scalability. This failure implies that more than one universe of attributes was included in the statements. There was some difficulty with the questions during the interviewing. Many of the respondents seemed to feel they were being forced to make a response they didn't want to make. This might be taken as an indication of some ambivalence in the way in which they define the Hutterites. It might also substantiate some of the thinking included in the theoretical framework in this regard.

A fifth question, which came earlier in the interview schedule, did not arouse objections as did the other four. The respondents were asked: "Would you say that the Hutterites are primarily an economic group or a religious group?" If the response was "both," they were then asked: "Which do you feel is more important to them: their economic activity or their religion?" With this question the manner in which the respondent defined the Hutterites is identified.

Four responses which operationally comprise the respondents' definition of the Hutterites were possible. The respondent might answer: "the Hutterites are a religious group;" "their religion is more important to the Hutterites than their economic activity;" "their economic activity is more important to the Hutterites than their religion;" or "the Hutterites are an economic group." Introducing this operational definition into the working hypothesis in its null form, the proposition which is tested is:

the scores on the composite attitude scale are not significantly related to the respondents' definition of the Hutterites as a religious group, a group whose religion is of primary importance to them, a group whose economic activity is of primary importance to them, or as an economic group.

Having operationally defined the concepts introduced in the theoretical framework and translated the nominal hypotheses into operational terms, it is now possible to apply the data collected in the field work of 1958 to these hypotheses. On the basis of these data the hypotheses will be accepted or rejected. The next part of this thesis gives a more detailed report of the limitations, findings and conclusions of the present survey and report of the study.

LIMITATIONS, FINDINGS AND CONCLUSIONS

Limitations

Before the data are presented, this study has two empirical limitations which must be made explicit. The first limitation regards the interview schedule which was used. The instrument was not completely successful in eliciting valid or reliable responses from the interviewees because of weak questions and inadequate probes in some places. Therefore, the conclusions drawn from the data are necessarily qualified.

The second limitation regards the number of respondents. Because of the small sample, the validity of the scales and the reliability of the statistical tests may be questioned. As with most research programs, time and resources have forced the investigator to content himself with less-than-ideal survey results.

Findings

Having operationally defined the concepts, the matter of statistically testing the relationships between them which have been postulated must be undertaken. The data are presented in the tables from which the working hypotheses were tested. The primary statistical test which was applied to these data is the Chi-square test. This test determines the significance of the relationship existing between two variables - i.e., the probability that the relationship existing between data could have arisen just by chance. If the probability of chance relationship is greater than .05 (the generally accepted confidence limit), the null hypothesis is accepted. In such cases where the probability is .05 or less the null

hypothesis is rejected.

Criticism may be made regarding the small frequencies contained in the cells of the contingency tables from which the Chi-square tests were made. However, Pearson and Bennet point out:

When the theoretical frequencies are smaller than ten and especially when smaller than five, the ordinary table values of X^2 . . . are inaccurate. This is especially true when there is only one degree of freedom. It is true to a lesser extent for two or three degrees of freedom. The error is negligible with more than three degrees of freedom.¹²⁴

Only three of the data tables have as few as three degrees of freedom, and these three are not significant at the .05 level of significance even without the Yates correction which has the effect of reducing the size of the calculated Chi-square. The sample size also exceeds the minimum of 50 to which Chi-square tests can be applied.¹²⁵

The Kolmogorov-Smirnov one-sample test¹²⁶ is also a test of goodness of fit which has the advantage over the Chi-square test of not being limited by sample size. Because it is not too well known, it was not used here. However, as a check on the validity of the Chi-square test, the three relationships found significant with Chi-square were tested using the Kolmogorov-Smirnov test. In each case the null hypothesis was rejected at the .05 level or above as with the Chi-square test.

¹²⁴Frank A. Pearson and Kenneth R. Bennett, Statistical Methods Applied to Agricultural Economics, John Wiley & Sons, Inc., New York, 1942, pp. 398-399.

¹²⁵Frederick C. Mills, Statistical Methods, third ed., Henry Holt and Co., New York, 1955, p. 538.

¹²⁶Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences, McGraw-Hill Book Co., Inc., New York, 1956, pp. 47-52.

The Chi-square test enables the investigator to say only that the relationship between two variables did not arise by chance; it gives no indication of the amount of association between them. However, it is possible with the Chi-square value to calculate the degree of association between significantly related variables. For the present study when the null hypothesis was rejected on the basis of the Chi-square test, the degree of association between the two variables was determined.

To test the degree of association Pearson's coefficient of contingency could have been used.¹²⁷ However, Hagood and Price suggest that for any table smaller than 5 x 5 another coefficient to measure the degree of association (called T for its originator, Tschuprow) should be used;¹²⁸ and this investigator has followed their recommendation.

Contact

The first hypothesis to be tested concerns the relationship of at-

¹²⁷Thomas C. McCormick, Elementary Social Statistics, McGraw-Hill Book Co., Inc., New York, 1941, pp. 203-208. Also, Margaret Jarman Hagood and Daniel O. Price, Statistics for Sociologists, rev. ed., Henry Holt and Co., New York, 1952, pp. 370-371.

¹²⁸Hagood and Price, loc cit. The coefficient T is defined in terms of an intermediate coefficient, phi square.

$$\phi^2 = \frac{\chi^2}{N} \quad \text{Then, } T^2 = \frac{\phi^2}{(c-1)(r-1)}$$

where c = number of columns in the contingency table, r = number of rows and N = number of respondents. T, of course, is the square root of the above expression. The first edition of Statistics for Sociologists (Henry Holt and Co., New York, 1941) gives a more detailed discussion of the advantages of the T coefficient and the limitations of the coefficient of contingency. Cf. Hagood, 1941, pp. 508-514.

attitudes toward the Hutterites and frequency of contact with them. The data are contained in Table II.¹²⁹ Since the Chi-square value lies out-

TABLE II. ATTITUDE TOWARD THE HUTTERITES
BY FREQUENCY OF CONTACT WITH THEM.

Attitude Score	Frequency of Contact			Total
	Never	Rarely	Fre- quently	
0	15	20	7	42
1	2	11	8	21
2	2	9	2	13
3	5	4	5	14
Total	24	44	22	90

$$\chi^2 = 10.881$$

$$P > .05$$

side the level of significance, the null form of the hypothesis is accepted as true, a finding which the theoretical framework suggested.

Related to frequency of contact is type of contact. This concept is also operationally defined in the previous section and its relationship to attitude is tested from Table III. The data from this table indicate that the null hypothesis of the relationship between attitude and type of contact must be accepted. This finding is not consistent with the theoretical framework which it was thought that a significant relationship between the two variables would be found. The small sample size may ac-

¹²⁹Following each table the calculated Chi-square value is presented. The level of significance is also indicated by P. Degrees of freedom are easily determined for each table - d.f. = (rows - 1)(columns - 1).

count for part of this lack of relationship, but in reality it may be only slightly related. The manner in which the frequencies were handled in the

TABLE III. ATTITUDE TOWARD THE HUTTERITES
BY TYPE OF CONTACT WITH THEM.¹³⁰

Attitude Score	Type of Contact			Total
	Busi- ness	Social	Reli- gious	
0	22	17	3	42
1	19	13	0	32
2	10	8	0	18
3	9	8	4	21
Total	60	46	7	113

$$\chi^2 = 9.455$$

$$P > .05$$

second table may also have had a strong influence.

The data from the present survey do not support the hypothesis that significant relationships exist either between frequency of contact or type of contact and one's attitudes toward the Hutterites.

Knowledge

The test of the relationship between attitudes toward the Hutterites and the second independent variable, knowledge, is based upon two tables.

¹³⁰Twenty-four persons had no contact with the Hutterites so they are not included in this table. The totals are greater than sixty-six because the respondents usually had more than one kind of contact.

TABLE IV. ATTITUDE TOWARD THE HUTTERITES
BY AMOUNT OF ACCURATE KNOWLEDGE ABOUT THEM.

Attitude Score	Accurate Knowledge			Total
	Low	Medium	High	
0	2	21	19	42
1	3	12	6	21
2	0	6	7	13
3	0	3	11	14
Total	5	42	43	90

$$\chi^2 = 11.243$$

$$P > .05$$

The first refers to the amount of accurate knowledge which the respondents indicated on the interview schedule (Table IV.) The calculated Chi-square

TABLE V. ATTITUDE TOWARD THE HUTTERITES
BY INACCURATE KNOWLEDGE ABOUT THEM.

Attitude Score	Inaccurate Knowledge			Total
	Low	Medium	High	
0	7	16	19	42
1	1	1	19	21
2	2	2	9	13
3	0	4	10	14
Total	10	23	57	90

$$\chi^2 = 15.312$$

$$P < .02$$

value fall outside the acceptable confidence limit, a finding consistent with the theoretical framework. The null hypothesis expressing the relationship between amount of accurate knowledge and attitude is accepted.

When the inaccuracy of the respondents' knowledge is considered, the relationship is significant and the null hypothesis is rejected (Table V.) Although the relationship is significant at the two per cent level, the degree of association between the two variables is not very high - $T = .2634$. This finding suggests further work to be done in the study of ethnic attitudes and intergroup relations to determine more precisely the relationship between misinformation accepted as true and attitudes toward ethnic groups.

Opinion Leaders

The determination of the relationship between the attitudes of one's opinion leaders and one's own attitudes created more difficulty than was expected. Seventeen respondents did not identify anyone when asked "What person(s) around here seem to know the Hutterites pretty well?" The 73 respondents who did answer identified 60 persons in reply to this question. Twenty-six of the persons named were not interviewed. The 34 "opinion leaders" who fell into the sample were identified by 51 of the respondents.

As was indicated in the previous section, it was assumed that the respondents would mention persons who had been influential in the formation of their own (the respondent's) attitudes and, therefore, persons whose attitudes would be similar to their own. The data raise doubts about the validity of this assumption. When the attitude scores of the 51 persons

mentioned above were compared with the scores of the 34 respondents they identified, a great disparity was found between the two. The reader will recall that scores on the composite attitude scale run from zero to three. The standard deviation of the respondents' attitude scores from those of their "opinion leaders" was 1.73 - i.e., nearly two scale points difference. Such a finding makes it necessary to reexamine the question used to measure the variable.

The question asked the respondents to identify persons who know the Hutterites well. In a sense, they were asked "who has much information about the Hutterites?" It was shown in an earlier part of this report of findings that amount of accurate knowledge and attitudes toward the Hutterites are not significantly related. On the basis of the (empirically-supported) hypothesis there would be no reason to expect a close relationship between the attitude score of a respondent and those he considers well informed. "Well-informed persons" and "opinion leaders" were thought to be synonymous theoretically, but the replies to the question demonstrate that they are not actually synonymous. The assumption that the respondents would identify their opinion leaders in response to the question asked is apparently not valid.

The reliability of this finding is supported by other data from the interview schedule. The respondents were asked to identify from what source they obtained most of their information about the Hutterites. Seventy-two per cent of them said they received most of their information from "personal contact with the Hutterites;" the remainder obtained most of their information from "talking with neighbors and friends." A Chi-square test was made to see if there was a significant relationship between

the source of information the respondents identified and their attitudes toward the Hutterites (Table VI.) This test indicates that there is no

TABLE VI. ATTITUDE TOWARD THE HUTTERITES
BY SOURCES OF INFORMATION ABOUT THEM.

Attitude Score	Information Source		Total
	Neighbors and Friends	Personal Contact with Hutterites	
0	15	27	42
1	6	15	21
2	3	10	13
3	1	13	14
Total	25	65	90

$$\chi^2 = 4.427$$

$$P > .05$$

relationship between source of information and attitudes toward the Hutterites, further supporting the preceding discussion.

The data which were obtained in the survey, although internally consistent, do not make it possible to test the hypothesis that:

ethnic attitudes are not significantly related to the attitudes of community opinion leaders toward the ethnic group.

Although persons were identified as being well-informed about the Hutterites, the question asked apparently was not valid to obtain identification of opinion leaders. Nevertheless, the data suggest, consistently with the theoretical framework, that persons regarded as informed are not necessarily influential in attitude formation and reinforcement.

Relative Deprivation

Two statuses were identified in the present study as indices of relative deprivation. Veteran status (and veteran organization membership) and tenancy or ownership status were both used to indicate relative deprivation. It was expected that these two statuses would be indicative of feelings of deprivation on the part of the respondents. Stated otherwise, it was assumed that an association between a negative attitude and veteran status, or a negative attitude and tenancy is explained by the concept of relative deprivation.

In spite of what was anticipated on the basis of the theoretical

TABLE VII. ATTITUDE TOWARD THE HUTTERITES
BY VETERAN STATUS.

Attitude Score	Veteran Status		Total
	Veteran	Non-veteran	
0	13	29	42
1	2	19	21
2	6	7	13
3	4	10	14
Total	25	65	90

$$\chi^2 = 5.097$$

$$P > .05$$

framework and informal observation there does not appear to be a significant relationship between one's attitude and whether one is a veteran of military service (Table VII.) This finding is not what was expected.

This result makes it necessary to conclude that one's veteran status is not used as a comparative frame of reference for evaluation of the different situations of the respondents and the Hutterites. In the light of this consideration the result of the test of the relationship between veterans' attitudes toward the Hutterites and whether they are members or non-members of veterans organizations is not so surprising as it might

TABLE VIII. ATTITUDE TOWARD THE HUTTERITES
BY VETERANS ORGANIZATION MEMBERSHIP.¹³¹

Attitude Score	Membership Status		Total
	Member	Non-member	
0	7	6	13
1	0	2	2
2	1	5	6
3	1	3	4
Total	9	16	25

$$\chi^2 = 4.049$$

$$P > .05$$

otherwise have been. From the theoretical framework it was expected that members of the VFW and American Legion would feel more deprived than non-members with a resultant significantly higher incidence of negative attitudes toward the Hutterites. On the basis of these data, however, it can be concluded that veteran status is not used as a comparative frame of

¹³¹These totals are the totals of veterans. Non-veterans were, of course, excluded from the test. Criticism of the small number would be more justifiable if the probability had been less than .05 and the relationship considered significant. See footnote #125 of this thesis.

reference to evaluate one's own situation in relation to that of the Hutterites.

The second status indicated in the survey shows a different picture. The relationship of land ownership to attitudes is apparent in Table IX which relates ownership status to attitudes toward the Hutterites. The

TABLE IX. ATTITUDE TOWARD THE HUTTERITES
BY OWNERSHIP STATUS (TENANCY.)

Attitude Score	Owner	Part Owner	Tenant	Total
0	13	18	11	42
1	1	15	5	21
2	2	8	3	13
3	9	4	1	14
Total	25	45	20	90

$$\chi^2 = 17.239$$

$$P < .01$$

degree of association between these two variables as indicated by T is .2796. This relationship can be understood because of the fact that the size of their landholdings is frequently brought up as a criticism of the Hutterites. This factor seems to be one on the basis of which the respondents compare their own situation to that of the Hutterites. In other cases of intergroup tensions, of course, land would not be expected to have the same influence on attitudes as exists in the Hutterite situation. This raises the interesting and important, but here unanswerable, question of the dynamics of selecting comparative reference groups.

Definition of the Hutterites

The fifth and final variable considered in this study regards how the respondents define the Hutterites - as a religious group or as an economic

TABLE X. ATTITUDE TOWARD THE HUTTERITES
BY DEFINITION OF THE HUTTERITES.¹³²

Attitude Score	Definition of the Hutterites				Total
	Hutterites Definitely Economic	Economics More Important to Hutterites	Religion More Important to Hutterites	Hutterites Definitely Religious	
0	30	1	3	7	41
1	11	1	1	6	19
2	3	2	1	6	12
3	2	1	1	10	14
Total	46	5	6	29	86

$$\chi^2 = 22.634$$

$$p < .01$$

omic group. The relationship is highly significant in terms of Chi-Square, but the degree of association is well below unity - $T = .2961$. This coefficient is the highest of those calculated, however, which suggests that this variable is relatively influential in the formation of the attitude patterns the respondents possess toward the Hutterites.

¹³²Four persons refused to respond to this item making the total less than 90.

Summary and Conclusions

Summary

1. No significant relationship was found between attitudes toward the Hutterites and the frequency of the respondents' contact with them.
2. No significant relationship was found between attitudes toward the Hutterites and the intimacy of the respondents' contact with them.
3. No significant relationship was found between attitudes toward the Hutterites and the amount of accurate knowledge the respondents have about them.
4. The relationship between attitudes toward the Hutterites and the respondents' inaccurate knowledge about them was found to be significant although the degree of association was less than .3.
5. From the present data the influence of opinion leaders upon the attitudes of their "constituency" could not be determined.
6. No significant relationship was found between attitudes toward the Hutterites and the respondents' veteran status.
7. The relationship between attitudes toward the Hutterites and the respondents' ownership status (tenancy) was found to be significant although the degree of association was less than .3.
8. The relationship between attitudes toward the Hutterites and the respondents' definition of them as an economic group or a religious group was found to be significant although the degree of association was less than .3.

Conclusions

This study was developed to see if there was empirical confirmation for two commonly made assumptions regarding the relationship of contact and knowledge to intergroup attitudes and to determine the applicability of three aspects of reference group theory to the study of intergroup relations. As an incidental result, the conceptual framework for analyzing attitudes which is common to much literature on ethnic relations would appear questionable because of the difficulty that arose in attempting to correlate the three measures of attitude utilized in the study.¹³³ In the previous section the data and findings were presented in some detail. Here the results are examined to answer the questions raised in the theoretical framework.

Because of the complications which arose during the scaling of the attitude measures, this thesis raises some very serious questions regarding the nature of attitude. The conceptualization adopted and utilized by other writers in the field did not provide this investigator with the most analytical tool it purports to be. The trichotomous analytical scheme which seems to be generally accepted in the field was followed to the best of this student's ability. Nevertheless, the results obtained by using this scheme were not completely satisfactory. The reader will recall the report of the dilemma in an earlier part of this thesis. On the basis of what happened with the data collected for the different components of atti-

¹³³See "Measurement - Composite Measure of Attitude," pp. 60-64 of this thesis.

tude, this thesis would appear to demand a clearer conceptualization and understanding of this phenomenon than presently exists in the literature reviewed. Without such clarification, prejudice can not be empirically studied adequately and our understanding of the structure and dynamics of intergroup relations can not be complete.

In the early statement of the problem to be studied reference was made to the assumption frequently implicit in action programs for the reduction of intergroup tensions that as contact increases attitudes become more favorable. This assumption was examined regarding frequency of contact and intimacy of contact. The data collected in the present survey do not support this assumption. This would suggest that action programs to reduce prejudice toward ethnic groups which are predicated upon this supposition are likely to have but little success.

It cannot be denied that contradictory evidence is offered from other studies of intergroup relations.¹³⁴ Before our understanding of intergroup relations is complete, this relationship needs to be clarified. The present study can not claim to do so; it only supports the objections to the assumption mentioned before.

The second assumption which Williams felt could be questioned regards giving people the facts and thereby reducing their prejudices. The present study also rejects this assumption. The data indicate no relationship between attitude and accurate knowledge. A qualification of this assumption was introduced in the present study regarding the relationship

¹³⁴see "Theoretical Framework - Contact," pp. 22-26 of this thesis.

between attitude and inaccurate knowledge. This has a low but significant relationship, a result which would appear to contradict the other finding and support the initial assumption. The theoretical framework suggests that the prejudiced person will use misinformation to support his attitude which might explain in part this relationship. This suggestion assumes, of course, that the inaccurate knowledge will be negative in nature.

From the data collected for this study it is impossible to suggest any causal relationship between the two variables. The relationship between attitude and inaccurate knowledge would be expected to be symptomatic, not causal. Another study of intergroup relations based upon the findings of the present survey should be able to assess more precisely the relationship between these two variables.

The question which was intended to measure the relationship between one's attitude and one's opinion leaders' attitudes gives no answers about the influence of other persons upon ethnic attitudes. Without evidence to the contrary, it is suggested that the theoretical presentation on this point is valid. Further studies should be made to support or disprove this proposition. In actuality, it has not been tested here.

The second concept subsumed under reference group theory - relative deprivation - was successfully utilized in the present study. This demonstrates the usefulness of reference group concepts for the understanding of intergroup relations. It also supports Merton's assertion that "propositions incorporating the concept of relative deprivation are readily subject to empirical nullification, if they are in fact untrue."¹³⁵ The re-

¹³⁵Merton, op cit., p. 230, footnote.

relationship between ownership status and attitudes toward the Hutterites may appear to support the economic hypothesis of prejudice. As was suggested in the theoretical framework, however, relative deprivation is more closely related to frustration psychology than to utilitarian motives for prejudice. To further advance the development of theory in the field of intergroup relations the concept of relative deprivation must be further clarified and its relationship to the economic hypothesis explained.

The fifth variable studied in the present survey may be accused of being applicable only to the Hutterite situation. If this is the case, it has no utility in the development of a theory of intergroup relations. In the light of what is understood about the influence of one's definition of any situation upon one's reactions and attitudes in it, this particular concept of the definition of the ethnic group as economic or religious should be meaningful in understanding problems of intergroup relations. The previous objection that this might have cultural limitations may prove to be crucial. Further study must be undertaken to determine the utility of this concept before it can be incorporated into a larger body of sociological knowledge.

As a whole, this thesis has demonstrated that existing theory is applicable to the Hutterite situation in some of the areas studied. Some modifications of existing theory have also been suggested in this thesis and have with partial success been applied in the present study. These are, specifically: the accuracy of a person's knowledge about an ethnic group, and one's feelings of deprivation relative to an ethnic group, and one's definition of an ethnic group. These modifications now need further

examination and verification.

Some of the work done here might be considered a contribution to sociological knowledge; but the major contribution of this thesis is to the experience and training of a student of sociology. It is this student's desire that the ideas presented here be pursued further in the hope that someday they, and others, might contribute to the alleviation of the tensions which exist between the Hutterites and their neighbors.

And further, by these, my son, be admonished:
of making many books there is no end; and
much study is a weariness of the flesh.

- Eccles. 12:12

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APPENDIX I

A. Trait List

The trait list which was administered to the respondents is reproduced below. Terms which have positive valence are in capital letters; negative terms are in lower-case letters. The underlined lower-case terms are the ones judged ambivalent. The three underlined terms followed by asterisks are the ones which were excluded from the calculation of the stereotype index because the interviewer disagreed with the judges scores.

VERY RELIGIOUS	<u>expansive*</u>
SMART (INTELLIGENT)	HELPFUL
TRUSTWORTHY	HARD-WORKING
unpatriotic	PEACABLE
<u>deceitful (sly, tricky)</u>	RICH
dishonest	QUIET
mentally retarded	EDUCATED
HIGH MORAL STANDARDS	CLEAN
EFFICIENT	LAW-ABIDING
poor citizens	DEPENDABLE
lazy	<u>strict</u>
clannish (stick-together-ish)	NEIGHBORLY
<u>powerful competitors*</u>	<u>materialistic</u>
<u>shrewd (clever)*</u>	DEMOCRATIC
grasping	POLITE
backward	PROUD
<u>hard-bargainers</u>	parasites
like gypsies	inconsistent
PATRIOTIC	inconsiderate
pushy	AFFECTIONATE
messy (sloppy)	lack initiative
like Jews	cowardly
PROGRESSIVE	unimaginative
immoral	CONSERVATIVE
rude (impolite)	TALKATIVE
hypocrites	illiterate
ignorant	scavenger
peculiar	COOPERATIVE
greedy	<u>quarrelsome</u>
insecure	humorless
poor	<u>carefree</u>
dictatorial	

APPENDIX I

B. Conceptions Statements

The following statements were read to the respondents to which they indicated their agreement or disagreement on this seven-point scale:

-3	-2	-1	0	+1	+2	+3
Disagree						Agree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

Following each statement, which is numbered as it appeared on the schedule, are numbers from (1) to (7). These indicate for each question the scored response which was used in scaling the items. In the column at the right hand side of the page are the marginal frequencies of scored response opposite the respective statements.

	Marginals
1. The large number of Hutterites in South Dakota is a menace to the welfare of the state. (6) (7)	27
2. Hutterite people are so different from other people that it is hard to understand anything about them. (6) (7)	30
3. There are some things about the Hutterites and their way of life which are very admirable. (1) (2)	34
5. The Hutterite problem will take care of itself if the colonies are left alone. (6) (7)	47
9. The Hutterites are poor hands to pay their bills. (6) (7)	56
10. No matter what one thinks about the Hutterites as a whole, one must admit that they are different by nature from non-Hutterites. (6) (7)	11
11. The Hutterites are friendly people. (1) (2)	62
14. The Hutterites are good farmers and stockmen. (1) (2)	83

- | | |
|--|----|
| 16. The Hutterites have a number of inherited defects which can never be corrected. (6) (7) | 43 |
| 17. The Hutterites are like any other group of people - some good, some bad. (1) (2) | 79 |
| 22. One can believe almost anything he hears against the Hutterites. (6) (7) | 59 |
| 23. The colony is a dictatorship as the people have nothing to say about how the "Boss" runs the colony. (6) (7) | 33 |
| 26. The Hutterites contribute much to the general welfare of the state of South Dakota. (1) (2) | 8 |
| 27. Although there are some exceptions, Hutterites are pretty much alike. (6) (7) | 3 |
| 29. The Hutterites are a decent, clean-living people. (1) (2) | 45 |
| 30. I am not interested in the Hutterites or how they get along with other people. (6) (7) | 36 |

APPENDIX I

C. Social Distance Statements

These ten statements were used on the interview schedule to measure social distance. The answers were given in terms of the same seven-point scale used for the conceptions statements. The numbers in parentheses identify the scored responses. Marginal frequencies are to the right of each item.

	Marginals
4. All Hutterites should be forced to leave the United States. (6) (7)	57
6. The Hutterites should not be allowed to set up any more colonies in South Dakota. (6) (7)	16
7. I would object to another colony moving in right around here. (6) (7)	11
8. I would accept a Hutterite as a close personal friend with whom I would visit back and forth. (1) (2)	25
12. The Hutterites should not be allowed to buy any more land in South Dakota. (6) (7)	19
13. Hutterites should not have the right to vote or hold public office. (6) (7)	43
15. Hutterites should not be allowed to be American citizens. (6) (7)	62
19. I would accept a Hutterite as a close relative by marriage. (1) (2)	11
21. South Dakota would be better off in the long run if we could drive out the Hutterites. (6) (7)	28
26. I would permit a child of mine to go to school with Hutterite children. (1) (2)	25

APPENDIX I

D. Definition of the Hutterites

These statements were included in the same list of items with the conceptions and social distance statements. Responses were given to these four items in the same manner in which the other questions were answered. The scored response to each statement again is identified in the parentheses and the marginal frequencies follow to the right.

	Marginals
18. The primary reason for the colony living of the Hutterites is the desire for economic gain. (6) (7)	31
19. If they weren't making any money by living together, the Hutterites would soon give up their colony life. (6) (7)	39
24. The Hutterites have to live in colonies in order to practice their religion. (1) (2)	37
25. Without their religious beliefs, the Hutterite colonies would soon break up. (1) (2)	61

APPENDIX I

E. Knowledge Statements

The following instructions were read to each respondent in preparation for this part of the interview:

The Hutterites sometimes seem uninterested in explaining their way of life to their neighbors. We are interested in learning how much people have learned about the Hutterites. So far as you understand, would you please tell us whether you agree or disagree with the following ten statements. Rank your answers according to the scale you used in the previous questions. Your answers will enable us to determine the extent to which the Hutterites have informed their neighbors about their colony living."

The number in the first parentheses indicate the correct response for the measure of amount of accurate knowledge. The scored response for the measure of inaccurate knowledge is the number in the second parentheses (followed by an asterisk.)

1. The land which the Hutterites own belongs to the individual families in the colony. (7) (1)*
2. With a few exceptions, all Hutterite adults eat together in one dining hall. (1) (7)*
3. The Hutterites are conscientious objectors. (1) (7)*
4. Hutterite schools are not required to meet state standards. (7) (1)*
5. The colony leaders are elected by the men of the colony. (1) (7)*
6. The Hutterites do most of their machinery repair work themselves. (1) (7)*
7. Hutterites usually have church every weekday evening. (1) (7)*
8. Hutterite church services are conducted in the German language. (1) (7)*
9. Hutterites are usually baptized before they enter grade school. (7) (1)*

10. Hutterite men wear beards to signify that they are married. (1) (7)*

APPENDIX II

Scalability of Present Data

From the following tables the scalability of the present data can easily be seen. The scale items are listed in their scale order with the respective data opposite.

A. Conceptions Scale

Question No.	Marginal Frequencies	Non-error Responses	Error Responses	C.R. ₁
1	27%	20	4	.9556
2	30%	22	9	.9000
9	56%	46	9	.9000
11	62%	56	9	.9000
17	79%	68	8	.9111
14	83%	75	7	.9222

90 respondents

6 items

random pattern of errors

Scale reproducibility:

$$C.R. = 1 - \frac{46}{6(90)}$$

$$= .9148$$

B. Social Distance Scale

Question No.	Marginal Frequencies	Non-error Responses	Error Responses	C.R. ₁
6	16%	13	1	.9889
12	19%	14	3	.9667
28	25%	18	9	.9000
21	28%	23	9	.9000
13	43%	38	9	.9000
4	57%	51	7	.9222
15	62%	56	9	.9000

90 respondents

7 items

random pattern of errors

Scale reproducibility:

$$C.R. = 1 - \frac{47}{7(90)}$$

$$= .9254$$

C. Composite Attitude Scale

The following criteria are explained in Appendix III. The data used to test the scalability of the items are presented in the table below, following the arrangement suggested in Appendix III.

f f f	f - f	- f f	- - f
10	1	8	21
3	0	5	42
f f -	f - -	- f -	- - -

From this table the necessary values are calculated.

$$C.R. = 1 - \frac{9}{3(90)} = 1 - .0333 = .9667$$

$$C.Sc. = 1 - \frac{9}{38} = 1 - .2368 = .7632$$

Probability of four error types - .28

Expected error types - .28(90) = 25.2

$$E.R. = \frac{9}{25.2} = .3571$$

$$S.D. = \sqrt{90(.28)(.72)} = \sqrt{1.8144} = 1.347$$

$$M.C.R. = \frac{16.2}{1.347} = 12.03$$

Marginal frequencies:¹³⁶

Social Distance Scale 16%

Conceptions Scale 29%

Stereotype Index 44%

¹³⁶The marginal frequencies of the three attitude measures were calculated using the "favorable" class for each trichotomy as the scored response for the composite attitude scale.

APPENDIX III

Three Item Scales

Criteria of Scalability

When attempting to scale a series of attitude questions an investigator may find himself forced to use fewer than ten items with which to construct a scale. Since Guttman first explained his theory and technique, researchers have used less than ten items in a scale and claimed relative reliability and validity for the scores they obtained. A procedure for scaling six or fewer items has been reported¹³⁷ which claims to produce valid scales which meet Guttman's criteria.¹³⁸

However, objections can be raised about the reliability of a scale with few items even though the data meet Guttman's other criteria. The reliability of a scale is decreased as the number of items is reduced because there is a greater probability of items scaling by chance when there are only a few included in a scale.¹³⁹ Nevertheless, at Cornell University, where Guttman first developed his scaling theory and techniques, research

¹³⁷Ford, op cit. Especially note pp. 285-298.

¹³⁸Id., p. 273, footnote. The reader will also recall the seven Guttman established for scalability: 1) scale reproducibility of at least .90; 2) item reproducibility of at least .90; 3) at least 10 items; 4) at least 100 respondents; 5) less error than non-error; 6) marginal frequencies of the scale items between 15 and 85 per cent; and 7) random distribution of error (sequences of less than 5 per cent of the respondents.) Cf. "Measurement - Guttman Scaling Theory," pp. 52-58 of this thesis.

¹³⁹Cf. you fer, vol. 4, pp. 3-90, passim. Chapters 2 and 3 are written by Louis Guttman and should be especially noted.

Sociologists have developed tests which enable an investigator to declare as few as three items scalable in the Guttman sense.

Dr. John P. Dean, associate professor of sociology at Cornell University and director of the "Elmira study", taught his graduate class in "analysis of survey data" - 1958 - a technique for developing three-item scales.¹⁴⁰ The criteria for scaling three items discussed in this appendix follow those presented by Dr. Dean.

According to Dr. Dean, four criteria must be fulfilled before three items can be considered scalable: 1) coefficient of reproducibility; 2) coefficient of scalability; 3) error ratio; and 4) scalability ratio. The data for calculating these values is usually recorded for easy handling in the tabular arrangement picture below:

$\begin{matrix} + & + & + \\ (a) \end{matrix}$	$\begin{matrix} + & - & + \\ (b) \end{matrix}$	$\begin{matrix} - & + & + \\ (c) \end{matrix}$	$\begin{matrix} - & - & + \\ (d) \end{matrix}$
$\begin{matrix} + & + & - \\ (e) \end{matrix}$	$\begin{matrix} + & - & - \\ (f) \end{matrix}$	$\begin{matrix} - & + & - \\ (g) \end{matrix}$	$\begin{matrix} - & - & - \\ (h) \end{matrix}$

The number of respondents of each scale type is recorded in the appropriate cell. In the response patterns pictured above the first sign to the left of each cell is the response to the hardest of the three items, the third sign from the left is the response on the easiest of the three items, and the second sign is the response on the second item. A scored response is

¹⁴⁰Dr. John Photiadis, Rural Sociology Department, South Dakota State College, who is a recent student of Dr. Dean's, has graciously taken the time to teach this student the technique for constructing such scales and has helped this writer to review and better understand Guttman scaling.

identified with a plus (+); the minus (-) indicates an unscored response. The letters in parentheses serve only to identify the cells for the purposes of this discussion. Perfect response patterns are quickly identified in cells (a), (c), (d) and (h). The others are error types. As an example of the use of this type of table see Appendix II-C.

The first criterion of scalability is the coefficient of reproducibility. This value is calculated with the same formula which Guttman developed. Because there are only three items in these scales, the number of respondents is always multiplied by three in the denominator.

$$C.R. = 1 - \frac{\text{errors}}{3(n)}$$

The number of errors is determined from the above table by summing the number of respondents in cells (b), (e), (f) and (g). As Guttman demanded in his initial formulation, this coefficient can be no less than .90.

The coefficient of scalability is concerned with the errors in the scale. The formula used in this calculation is

$$C.Sc.^{141} = 1 - \frac{\text{errors}}{\text{maximum error}}$$

The numerator in this formula is the same as for the preceding one. Maximum error is determined easily by adding (e) to (h) and subtracting this sum from the total number of respondents. This result is called maximum error because (c) and (d) could be considered error types of (a) and (h), respectively. These latter two are the only ones which can definitely be considered non-error types.

¹⁴¹Sc is Dean's notation for "scalability."

The error ratio is the ratio of the actual number of errors to the expected number of errors and must be less than .60. The formula is quite simple:

$$E.R. = \frac{\text{actual number of errors}}{\text{expected number of errors}}$$

There are two preliminary steps before this ratio is solved. To find the expected number of errors, the table on page 117 is used. This table is part of the mimeographed material Dr. Dean uses in his class in "analysis of survey data." With this table the probability of four error types arising by chance in a set of three items is computed. The expected number of errors ($= p \times n$) is the number of respondents in the survey (n) times the probability (p) of four error types occurring by chance which was derived from the aforementioned table.

The scalability ratio, the fourth and last criterion, is the difference between the actual and expected error divided by the standard deviation of the error-types. The standard deviation is calculated by means of the following variance formula:

$$S.D.^2 = n(p)(q);$$

where n = number of respondents, p = probability of four error types (from previous ratio), and $q = 1 - p$. The scalability ratio itself is calculated with the following formula:

$$Sc.R. = \frac{\text{expected} - \text{actual errors}}{S.D.}$$

The scalability ratio should be greater than 5.0 for the items to be considered scalable.

When these four criteria are met, says Dr. Dean, they present a

fairly good indication that a set of three items belong to one dimension. By reference to Appendix II-C the reader can see that the data from the present survey meet these criteria, making it possible to use a composite scale score to operationally define attitude.¹⁴²

Sampling Variation in Error-types for Scales of Three Dichotomous Items

Suppose we want to check to see how well three dichotomous items fit the Guttman scale model. If the cutting points of the items are in the high or low percentiles (e.g. 10% or 15%, 80% or 90% rather than 45% or 55%) then the probability of getting scale types by chance is much greater and the probability of getting error types is much less. Since the total number of response types is the scale-types plus the error-types, the probability of getting error types is one minus the probability of getting scale types.

How to use the Table:

Suppose in a given instance the proportion of plus responses for three dichotomous items are 20%, 50% and 70%. Enter the table at 20% under "First Marginal," 50% under "2nd Marginal," and read across to the column headed by 70% under "3rd Marginal." The figure .25 found there means that the probability of getting error-types by chance if the three items are scaled together is .25. If 400 cases are used, the mean number of expected error-types by chance ($M = np$) is $.25 \times 400$, or 100 error-types. The standard deviation of the mean number of error-types ($S.D.^2 = npq$) is

¹⁴²The following section is excerpted in full from a mimeographed sheet Dr. Dean distributed to his class. The table and description are apparently Dr. Dean's own work.

$\sqrt{400 \times .25 \times .75}$, or 8.7. If the cutting points are inbetween the deciles (e.g. 18%, 46%, 73%) then read the table by interpolating between 10% and 20%, 40% and 50%, and 70% and 80%.

To compute the Error Ratio:

If the actual number of error-types found when the three items are cross-tabulated is, say, 80 error-types, then the error ratio is 80/100 or .80.

To Compute the Scalable Ratio (S_cR):

expected error-types	=	100
less actual error-types		<u>-80</u>
difference		20

$$\frac{\text{Diff}}{\text{S.D.}} = \frac{20}{8.7} = 2.3 = \text{S}_c\text{R.}$$

P. of 4 error-types

First Marginal	2nd Marg- in 1	3rd Marginal								
	90%	80%	70%	60%	50%	40%	30%			
10%	20%	.10	.12	.14	.16	.18	.20	.22		
	30%	.10	.13	.16	.19	.22	.25			
	40%	.10	.14	.18	.22	.26				
	50%	.10	.15	.20	.25					
	60%	.10	.16	.22						
	70%	.10	.17							
	80%	.10								
	20%	30%	.17	.20	.23	.26	.29	.32		
40%		.16	.20	.24	.28	.32				
50%		.15	.20	.25	.30					
60%		.14	.20	.26						
70%		.13	.20							
80%		.12								
30%		40%	.22	.26	.30	.34	.38			
		50%	.20	.25	.30	.35				
	60%	.18	.24	.30						
	70%	.16	.23							
	80%	.14								
	40%	50%	.25	.30	.35	.40				
		60%	.22	.28	.34					
		70%	.19	.26						
80%		.16								
50%		60%	.26	.32	.38					
		70%	.22	.29						
		80%	.18							
		60%	70%	.25	.32					
	80%		.20							
	70%		80%	.22						
			90%							
			80%							
70%										
60%										
50%										
40%										
30%										